

ROCKS AND MINERALS

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Vol. 1 1961

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ROCKS and MINERALS

PETER ZODAC, Editor and Publisher

**America's Oldest and Most Versatile
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ogist, Lapidary.**

Published Bi-Monthly

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CHIPS FROM THE QUARRY

*Merry Christmas and a Happy New Year
to all our readers and friends!*

*May 1962 bring to this war-wearied world an end of all
hostilities and the beginning of a new peace which shall be
as enduring as the Rock of Gibraltar. Let us all strive to get
on God's side and not waste our time while on earth in
petitioning Him to get on ours.*

YOU CAN'T PLEASE EVERYONE!

Editor R&M:

I notice you are starting my subscription with a back issue of your magazine. Was there a particular reason for this — such as trying to unload excess copies?

— Irate subscriber

This new subscription was received March 7, 1961 and was started with the then current Jan-Feb, 1961 (March-April did not come out until March 15th—held up due to unusually bad winter weather). Most new subscribers are anxious to receive their first copy "right away" and many are delighted to start off with the 1st issue of the year — but our irate subscriber was different.

PLEASE CHECK FIRST

We would gratefully appreciate if all readers who may be planning a long article for R&M would first check with us to see if we can print the article on short notice. It is quite a problem to print the many articles we always have on hand and so, when a long article is received unexpectedly, it throws us off balance and especially if the writer requests an early printing of his article.

PHOTO ON FRONT COVER

The photo on the front cover of this issue is of a beautiful flower like group of selenite crystals known as a desert rose. Its color is red-brown, size 3 x 3 inches, location, Miles (Runnels Co.), Texas.

This fine specimen is in the collection of R. D. Tomlinson, 27 LaSalle Drive, Deep River, Ont., Canada.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF ROCKS AND MINERALS, published BI-MONTHLY, at PEEKSKILL, N. Y., OCTOBER 1st, 1961.

1. The name and address of the publisher, editor, and managing editor, and business manager is PETER ZODAC, PEEKSKILL, N. Y.
2. That the owner is PETER ZODAC, PEEKSKILL, N. Y.
3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: NONE.
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholders or security holders appear upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given: also that the said two paragraphs contain statements embracing affidavit's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than of a bona fide owner and this affidavit has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.
5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960 to be included in all statements regardless of frequency of issue)—7785

PETER ZODAC
March 30, 1962.
MARY DORSEY

Sworn to and subscribed before me this 21st day of Sept., 1961. My Commission expires

COMING EVENTS

Nov. 11, 12, 1961 — Tampa Bay Mineral & Science Club will hold a show in Tampa, Fla., that will feature rocks, fossils, gemstones, minerals, shells, artifacts and Tampa Bay geodes. For particulars contact the Corresponding Secretary, Ted Fichardi, 3815 San Pedro, Tampa, Fla.

Nov. 18, 19, 1961 — The St. Louis Mineral & Gem Society will hold its 2nd. Annual Mineral & Gem Show, at the Town & Country Mall, Page Ave. & Woodson Rd., St. Louis, Mo. The outstanding feature of the Show will be Competitive and Non-Competitive Exhibits by the Society Members. Several Dealers will have booths. FREE ADMISSION . . . FOOD AVAILABLE . . . PLENTY of FREE PARKING.

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Exhibition: February 4 thru February 25, 1962
Chicago Natural History Museum, Chicago 5, Illinois

Entry forms from Mr. Eugene Stitz, 4754 N. Karlov Ave., Chicago 30, Illinois

July 27-28-29-30-31, 1962 — AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES and MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES combined 22nd convention and show. Veterans Auditorium, Des Moines, Iowa. Des Moines Lapidary Society, hosts. George Wingert, Show Chairman, 1347 East Douglas. Byrd Allie, Dealers Space, 3610 Amherst, Des Moines, Iowa.

GIANT SAPPHIRE STRIKE IN NORTH CAROLINA CALLED A HOAX

By GEO. F. SIZE, M. D. Pres.

Eastern Federation of Mineralogical and Lapidary Societies, Inc.

P. O. Box 236, Murphy, North Carolina

As the new President of the Eastern Federation of Mineralogical and Lapidary Societies I feel it is my duty to do all that is within my power to help keep our Earth Science Hobby Honest.

In the past several weeks there have been some false reports put in many newspapers throughout the nation. The reports state that there was a "Historic Sapphire and Ruby found in the Cowee Valley region of Western North Carolina". It was reported that the Ruby and Sapphire were believed to be the largest ever found in the United States. A Mr. Kermit Martin of Bryson City claimed to have found the Ruby and Sapphire in Cowee Valley. The statements were false. The Ruby and Sapphire were found in Clay County, N. C. — not Cowee Valley which is in Macon County, N. C. The specimens (for they are such) were found about four years ago by Harold Moss of Hayesville, N. C. and purchased by Mr. Martin in July of this year. Mr. Martin runs a rock shop but is not a member of the Eastern Feder-

ation. As far as I have been able to find out he is in the Rock and Mineral Business solely for the profit he can get. He has even admitted the HOAX but has refused to retract the statements in the NEWSPAPERS.

As President of the Local Tri-State Rockhounlders we have exposed this HOAX. I now feel that as President of the Eastern Federation I am duty bound to my fellow members to help to keep our hobby clean. I know that if our hobby is to prosper we must do all in our power to prevent anyone from making false statements in order to mislead the public. This may bring a few people into the area but when they find it is misleading they will never return and will prevent others from returning. I wish to go on record in stating that there are many wonderful mineral locations in Western North Carolina that require no mistatements to attract the visiting Rockhound. I am thankful that there are only a very few of the type that will mislead for personal gain.

VISITING ROCKHOUNDS WELCOME

The following subscribers would be delighted to have rockhounds call on them when passing through their cities. If any one else wants his name added to the list, just let us know.

- Bill & Alta Aulsebrook, 1/4 mile west of Hwy 7 on Lake Hamilton at the "Pretti Point" turn sign, Hot Springs, Ark.
- J. J. Brown, Rt. 1, Box 202, Benton, Ark.
- John & Clara Roder, Hwy 7 North, 6 miles from downtown Hot Springs, Ark.
- Mr. & Mrs. Howard Kidd, Riverside Cabins, Murfreesboro, Ark.
- CWO Vernon R. Braun, 9004 Rosewood Drive, Sacramento 19, Calif.
- Mac & Maggie McShan, 1 Mi. west on Hy. 66, Needles, Calif.
- O. A. Reese, 806 E. Boulder St., Colorado Springs, Colo.
- F. J. Strah, Buena Vista, Colo.
- William Guild, Director The Science Center, St. Petersburg, Fla.
- P. W. Holstun, 5235 Attleboro Ave., Jacksonville 5, Fla.
- Mrs. John C. Lawrence, 2311 Arcadia Dr., Miramar, Hollywood, Fla.
- Miss Marion McEntire, 349 N. Elm St., Commerce, Ga.
- Charles Johnson, 1033 Seminole Trail, Frankfort, Ky.
- Albert & Emily Bettey, 139 Hale St., Winchendon, Mass.
- Raymond J. Crisp, 9 Gilletts Lake, Jackson, Mich.
- Mr. & Mrs. Stanley Oman, Little Girl's Point on Lake Superior, Saxon, Wisc. (16 miles north of Ironwood, Mich.).
- Hjalmer Bergman, Mineral Rock Gardens, Ely, Minn.
- Gust Korpi, 5th St., Box 132, Soudan, Minn.
- Mrs. Lawrence Shepard, Bovey, Minn.
- Merryl & Mary McCoy, RR 3, Kahoka, Mo.
- Miss Irma Painter, 1315 Burlingame Pl., Burlington, N.C.
- Thurston Smith (12 yrs.), Hillsboro, N. C.
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- Thomas W. Carroll (age 16), 101 N. Chestnut St., Mount Olive, N. C.
- Herby Bolik, 26 Wilson Drive, Morganton, N. C.
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- Melvin E. Wagner, E. Main St., New Freedom, Pa.
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- Mr. & Mrs. A. B. Carson, 12 Catechee Ave., Greenville, S. C.
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- V. Sabin, 723 Steves, San Antonio, Texas.
- Dr. & Mrs. H. R. Thomas, Keith Lane & Cedar Springs Dr., Athens, Tenn.
- Larry Volkert, 54 N. Pleasant St., Middlebury, Vt.
- Nelson R. Longe, 5 Leonard Ave. Springfield, Vt.
- James T. Fulton, 829 N. 18th, Coeur d'Alene, Idaho
- Clyde V. Downing, 500 W. 14th St., Carroll, Iowa.
- Anthony Gricius, 4426 Montana St., Chicago 39, Ill.
- John H. Kaiser, East 3rd St., Sheridan, Ill.
- Ralph Dugan, 1338 Franklin St., Columbus, Ind.
- Walter Reeves, R 3, Greencastle. Ind.
- Susan Tranter, 2 E. Walnut, Sharpsville, Ind.
- Mrs. Bryce Allen, Box 486, Tribune, Kans.
- Mrs. Louisa Stevens, 1 Simon St., Nashua, N. H.
- James B. Moore, West St., Antrim, N.H. Phone 154
- James R. Ferguson, 21 Half Moon Lane, Tarrytown, N.Y.
- Mr. & Mrs. Waldo Blair, 1777 E. 31st St., Lorain, Ohio
- Edward B. Thomas, 4 West Ave., Owego, N.Y.
- Richard C. Johndy, Cascade Road, Lake Placid, N. Y.
- William Johnson, Parker's Trailer Court, Leesburg, Va.
- Bobby Parker, Evergreen Ave., Rye, N. Y.
- Rudy J. Bland, Jr., 3218 Rueger St., Richmond, Va.
- Wm. Carter, 1524 Wellesley St., Roanoke, Va.
- Malcolm Arnett, Fremar Art Studio, Corydon, Ky.
- Randolph E. Caney, 3rd 21 Lancaster Ave. West Springfield, Mass.
- Joseph Skaritza, Campbell Rd., Diehls Tr. Pk., Sauquoit, N.Y.
- Mrs. M. L. Sheiron, Hwy. 82, 8 miles east of Hamburg, Ark.
- Donald F. Crain, P.O. Box 2, Grand Junction, Colo.
- Mrs. F. J. Parke, P.O. Box 837, Altamonte Springs, Fla.
- Joe Monteith, Box 31, Gilkey Sub.-Sta., Hwy 221, Rutherfordton, N.C.
- Quinton J. Stephenson, Box 237, Garrysburg, N.C.
- Miss Janet Herbst, 4359 Wooster Rd., Fairview Park 26, Ohio.
- Jesse Lininger, Jr., R.D. 3, Dillsburg, Penn.
- Susan Zinn, R.D. 5, Hanover, Penn.
- Thomas H. Webb, Box 95, Linville, N. C.

(Continued on page 580)

A VISIT TO THE BLUE-JOHN CAVERNS NEAR CASTLETON, DERBYSHIRE, ENGLAND

By B. M. SHAUB

159 Elm Street, Northampton, Massachusetts

The term "blue-john" to the more sophisticated mineral collector, sets his guidance system in one direction only and that is toward England, the home of the so called blue-john. This material in the rough, as-mined, is not at all spectacular. It is, as a matter of fact, quite drab and uninteresting except for its magic name. The material is a banded or crustified fibrous or columnar variety of fluorite in which there are zones or bands of relatively clear and/or cloudy fluorite and the other bands may vary from a light to a dark blue color and at times almost black. Some specimens have a yellowish hue. As cabinet specimens the pieces of blue-john, Fig. 1, are quite uninteresting and cannot be compared with the magnificent green and purple crystals of this mineral from Weardale, England and the spectacular crystals of fluorite from other English localities or the very fine specimens consisting of groups of crystals of many colors from the Illinois-Kentucky fluorite region or

the splendid specimens from Westmoreland, New Hampshire or from Clay Center, Ohio and many other localities.

The blue-john locality is close to Castleton, Derbyshire, England where there is a pleasant and comfortable old, yes, very old, hotel where tourists may find good accommodations. Here also are a few shops where blue-john art objects may be purchased at reasonable prices considering the skill required to work this brittle material which has four directions of perfect cleavage.

The softness of the fluorite, 4 in Mohs scale of hardness, makes it possible to turn the material on a lathe. First the pieces are rough ground to the general shape the finished art object is to take. During the rough shaping of the piece and subsequent turning operations, the material being ground or turned must be bonded periodically with a rather low-melting cement which is hard enough and sufficiently tough to bind together the irregular fluorite grains and to hold them

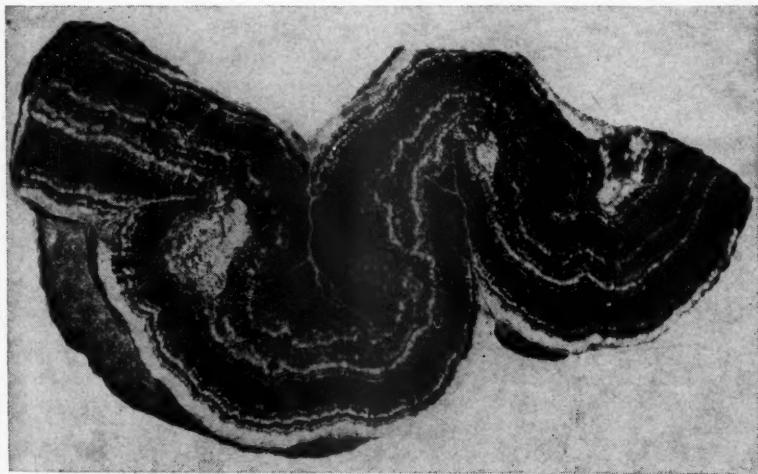


Fig. 1. A specimen of blue-john, approximately 1 foot by 3 feet long in the British Museum of Natural History in London, England



Fig. 2. Items in the Harrison blue-john collection, Castleton Gift Shop, Castleton, Derbyshire, England. The shop is operated by Mrs. Brenda Taylor, a daughter of Mr. Harrison.

in their relative positions during the reduction of the piece to its final shape and polish. As blue-john is a relatively dense material and has a rather low porosity the cement, when applied does not penetrate deeply into the body of the substance. Hence frequent and time consuming

treatments by the bonding process are necessary. In spite of careful treatment and handling it is said that failures do occur often enough to make the turning a somewhat hazardous operation for the material undergoing the cutting and polishing process.

It is doubtful there are as many collectors of blue-john art objects at present as there have been in the past, for men with means are not as numerous as in the pre-war days and the costs of production are much higher; besides it is said that there is a scarcity of material. The scarcity is probably only relative. The operators are reluctant, indeed, to sell any rough stock that can be cut into some art object such as small bowls, dishes, cabochons for brooches, pins and other jewelry which find a ready market in the tourist trade. Without a market or demand for the larger art objects, the material remains in storage uncut or in the ground where it is relatively safe until needed. Blue-john is a material which has not been subjected to imitation and synthesis.

A fine collection of blue-john art objects is in the Chatsworth House nearby, and the house contains a window made of many fine pieces of the mineral; it is not open to the public. Famous collection of blue-john may be found in

a half dozen places in England if one has reason to study them and can obtain an appointment.

For the tourist visiting the locality, he can stop at the gift shops in Castleton, as we did, and there obtain such art objects as are available and one desires. He can also obtain such information as is desired. At the Castleton Gift Shop we met Mrs. Brenda Taylor who operates the shop. In a case in her store were the blue-john art pieces, Fig. 2, of the collection of Mr. Harrison, her father. The family operates the Treak Cliff Cavern which is only a short distance from Castleton.

Our trip to the Treak Cliff Cavern, Fig. 3, was a very interesting and enjoyable one. Here, as at the other caverns in the locality, a modest entrance fee is required. We accompanied a party lead by Mr. Peter Harrison, a brother of Mrs. Taylor. The features of the cave consisted chiefly of an irregular solution channel in the limestone. In addition to a good display of yellowish stalactites



Fig. 3. Entrance to the Treak Cliff Cavern in a limestone formation and located in the side of a hill in the pleasant rolling countryside near Castleton, Derbyshire, England.

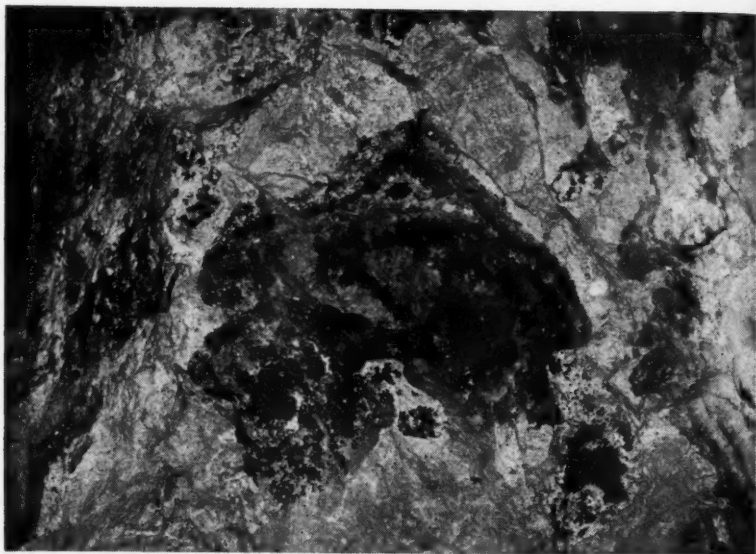


Fig. 4. A view of an area in the ceiling of the Treak Cliff Cavern showing patches of blue-john and calcite in limestone. From such occurrences, it is difficult to recover the fluorite in pieces large enough to cut into art objects. Much material is wasted in the mining of such occurrences.

and stalagmites the walls and ceiling surfaces showed a number of good exposures of the blue-john fluorite, Fig. 4. The fluorite usually occurs as crustified fissure fillings along fractures in the enclosing limestone. At places the fluorite appears to be enclosed within the limestone, however the fracturing and broken nature of the wall rock allowed solutions to penetrate along incipient fractures where the fluorite developed. It is relatively easy for the fluorite-bearing solutions to permeate the disturbed and stressed areas in the limestone. In addition to the fluorite, the solutions carried an appreciable amount of calcite which usually developed into the last band or crust within the fissures or cavities. The center on one cavity, Fig 5, contained a number of well-formed scalenohedral crystals of calcite up to several inches long.

The writer is indebted to Mr. Harrison, for pausing long enough with his party on tour of the cavern, to permit

him to take a number of color and monochrome pictures of the calcite formations and the blue-john areas which occurred at a number of places in sizeable masses in the walls and ceiling of the cavern. These fissure fillings are much earlier than the present solution channels. The Treak Cliff Cavern is the only one in the area where the blue-john of any consequence can be seen in its normal occurrence. A couple of other caverns in the vicinity were also visited. Each has its special attraction but no fluorite of any size is to be seen in any of the caves, other than the Treak Cliff Cavern.

We visited the so called Blue-John Caverns in the same general area. The entrance to this cave is located in a picturesque setting, Fig. 6, a few hundred yards from the highway. Here there is a gift shop where various art objects, souvenirs and polished slices of blue-john can be purchased. The illustration shows that the site of the shop and entrance to the caverns offer an intriguing

setting for visitors, and the stone wall surrounding the shop and cavern entrance give one the feeling that here is wealth that requires the utmost caution and sagacity for the protection of the fortune hidden therein. However, the shop is merely an inviting one with the usual display of locality novelties which a traveler so often finds wherever he journeys and which he also greatly appreciates, for the mementos accumulated along one's journey to distant lands carry a lasting and pleasurable memory of exciting days and journeys of the past. As for the caverns at this fascinating setting, they are merely solution courses in the limestone with only a relatively few cave formations and the merest patch of fluorite to greet the visitor. The chief attraction of these caverns is the surface layout, but this is very interesting indeed; and that formidable stone retaining wall, how impressive on first sight and without serious thought it stands to guard the establishment. Sheep

grazing is one of the chief agricultural pursuits and with plentiful loose and free pieces of limestone, walls of this material have been built around most of the fields in the area thereby forming many striking patterns to the traveler as he views the landscapes. In this instance the wall is hardly justified as a protection to the shop and caverns but instead to the necks of the "lambies" that graze near the precipitous faces of the rock walls formed by excavations into the hillside.

Within the area are some quarries and old mines once worked for lead. To the mineral collector, these may have a passing interest, and an occasional specimen, however it appears that the era of mineral collecting by the amateur, in this as well as in most areas in England, are events of the rather distant past when the mines, which were always rather small, were in operation. It is interesting to note that the term "blue-



Fig. 5. A well-banded exposure of blue-john in the Treak Cliff cavern. The illustration shows the crystallized fluorite next to the wall and followed by calcite. Large calcite crystals occupy the center of the original cavity.



Fig. 6. Site of the Blue-John Caverns a few miles from Castleton, England.

john" was originally applied, by the miners, to the galena that was mined in this area as stated in "Sowerby's British Mineralogy" volume 1, 1804.

'A LUCKY FIND'

We visited the "diamond" fields in Middleville, N. Y. in June to see if we could strike a pocket of "diamonds" but, no luck. We dug for hours without accomplishing much. We picked up a lot of small "diamonds" on the surface as it had rained the night before, most of them were covered with mud. It got hot and we got disgusted so headed for home. We later washed up our loot and to our surprise found one "diamond" that was square shape (no points). We think this is very unusual for a Herkimer. We looked over a number of "diamonds" at home to see if we had others like it but couldn't find one. In view the "diamond" found could be mounted in a ring, as found, we would like to know if other "diamond" collectors have found any like this. We think it is rare and unusual, so we hope to return and try our luck again and find that big pocket some day.

Would like to hear comments on story above.

Mr. & Mrs. Emil Studli
311 Chestnut St.
Oswego, N. Y.

A Herkimer "diamond" is a clear, doubly

terminated rock crystal, so brilliant, limpid and distinctive in form, that it is easy to see why it is very popular with collectors. The finest "diamonds" occur in Little Falls and Middleville, both in Herkimer County, N.Y. —hence they are commonly known as Herkimer "diamonds".

ENJOYS R&M!

Editor R&M:

I certainly enjoy reading the articles and comments in the first class geological magazine, R&M, which really give me inspiration for my leisure time hobby — geology and mineralogy.

Since I have retired from school work (high school and college) I spend a lot of my leisure time in the collecting of rocks and minerals, also Indian artifacts and conservation of our natural resources. So you see, I am busy. I spend my summers in the midwest (Indiana, Illinois and Kentucky) and my winters in Arizona. I have 2,000 geological and mineralogical specimens in my collection and keep adding more each year.

Harry W. Mauntel
RR No. 1
Holland, Ind.

WHERE IS IT?

By G. THURSTON COLE

Rumford Point, Maine

One of the most fascinating aspects of mineral collecting, to me, is the search for lost and forgotten localities. Every highly mineralized region, such as the Maine pegmatite belt, abounds with them. Many of these localities are known only by word-of-mouth reports, passed down from one generation to another. Others are mentioned in the early geological literature of a region, and in early editions of text books and manuals of mineralogy. Even when these old localities have been recorded, the descriptions of them are often vague and leave much to be desired. As an example, the Jackson reports on the "Geology of The State of Maine" (1837 - 1839), in mentioning Windham, state: "In this town, near the bridge, I found an abundance of mica slate rocks, filled with large crystals of staurolite (staurolite), also large detached blocks of granite, containing a rare mineral called spodumene, it being one of the minerals containing the new and fixed alkali, lithia. Crystals of garnet also abound." The question for us of the present day is: Where is (or was) "the bridge"? The passage of time has brought so many physical changes in the topography of long settled regions, old mineral localities are becoming increasingly difficult to find and identify. Last year, an out-of-state mineralogist, speaking of this fact, told me of a once-noted locality in the Buffalo, New York, area now having a Sears-Roebuck store on the site. The late Professor Charles Palache, of Harvard University, wrote interestingly, some years ago, about the localities in Massachusetts which have been lost to collectors and students because of the ever-spreading works of man. Tracking down these old lost and forgotten localities requires considerable detective work, and constitutes not a mineralogical "Who done it?", but, rather, a "Where is it?". In the paragraphs to follow, I will list a few of the many local mysteries along these lines, and hope that some of the Perry Masons among us may solve them.

Going back to the Jackson Reports, the second one, dated 1838, said: "In Parsonfield we found an abundance of a rare variety of ergeran, and beautiful crystals of yellow garnet, pargasite, adularia and scapolite. They occur in a granular variety of limestone, which is scattered in profusion, in the fields near Dr. Swett's house. In a stone wall, north from Stackpole's Tavern, we obtained some beautiful specimens of these minerals which are found in angular boulders of granular limestone. Proceeding North 15 degrees West, the number and size of the boulders is said to increase; and when I pointed in that direction, Mr. Swett remarked that he had found them along that line. Hence, it is probable that the parent bed of limestone lies in that direction." Where is it?

Going through Waterford, the Jackson report, cited above, said: "On Major Stone's farm, Mr. E. L. Hamlin discovered many years ago a curious rock, composed of phosphate of lime and quartz. Also a fine crystal or richly colored amethyst. It was not attached to rock, and was probably out of place, since no more have since been discovered there. Mr. Coolidge presented me with a mass of lepidolite, like that of Paris, which he found on his farm." Where is it?

In Greenwood, the same reports spoke of finding nodule-like masses of plumbago, some of them "three inches long by two inches thick, suitable for drawing pencils, and of good quality", and that the locality was "near" the estate of Deacon Porter; also that it was near the "South Eastern corner" of Greenwood, "and occurs on the hill almost overhanging the road." Where is it?

In the third of the Jackson reports, an account is given of a visit to the Town of Rumford, in September, 1838. The glacial esker, between Rumford and Woodstock, familiarly known as "The Whale's Back", was known then by the same name, and commented upon. Jackson also spoke of plumbago in Wood-

stock on the southwest side of a hill "on the estate of Mr. David Holt". There is an extended account of the "Paint Mine" so-called "on the estate of Mr. Samuel Lufkin, three miles north of the village of Rumford." This locality is called the "Paint Mine" to this day, and is situated on the land of Robert Silver, North Rumford. As an interesting commentary on this same locality, in 1826, Rev. Daniel Gould, the second Congregational minister in Rumford, wrote a descriptive sketch of the Town of Rumford for Williamson's "History of Maine". Gould described the "Paint Mine" at some length, and the uses to which the material was put. An interesting thing about Gould's description is this sentence: "There are three sorts of it, red, yellow, and black." And this: "The black is really so, and when it has been analyzed, and the method of preparation known, it may be as durable and handsome as any paint of the like color, and would be very valuable." Neither Jackson's report nor later ones to this day have ever mentioned any black pigment. Since pyrolusite or manganese dioxide is known to occur in the same manner as bog iron ore, it is probable that Gould's "black paint" is pyrolusite. Where is it?

When the Jackson party visited Rumford Falls, also in 1838, mention was made of a bed of granular limestone "on a point just below the great falls." This was described as being in beds, between strata of mica slate, some of the beds being ten feet in thickness, and they contained enough high quality lime to burn 100,000 casks. It was stated that the beds were in or close to the water, and would have to be drawn up the river bank, like logs from a mill pond. The limestone was described as containing crystals of actinolite and pargasite in small grains and fibers. Since this limestone bed is now and permanently under water, because of an adjacent dam, and is therefore lost to sight, one wonders if there may be remnants of the strata in the vicinity. Jackson collected "yellow garnets" in Rumford (Town) and Rumford Falls; also, limestone, sahlite, and garnets at Rumford

Point. When the writer of this article was a boy of ten or eleven years, and first read that limestone was found and collected at his home village, he was excited, and buying a bottle of hydrochloric acid and a medicine dropper, began to drop acid on every rock and outcropping of rock he could find. And, now, forty years later, he is still looking and hunting for that limestone. Where is it?

There's an old-time report of green tourmalines having been found on the Goddard Ledge, North Rumford, "not far from the road." Where is it? And where is the silver or lead that the Indians claimed to have found on Rumford White Cap, and used to melt down and cast into bullets, near the Obed Taylor place? And the silver which some Moody of Andover used to get in Sawyer Notch, and for whom Moody Mountain is named? And the "green tourmalines" from Speckled Mountain, Peru? And where is the location of the deep pink tourmalines which some of the old text books report as coming from Peru, Maine? These are only a few of the Where-Is-Its? There are many more. What are yours?

REPORT FROM LIBERIA

Editor R&M:

This is my first report from Liberia. I arrived here July 16, 1961, by PAA Jet. The first sight I saw was driving about 40 miles through about 85,000 acres of the Firestone plantation blanketed with rubber trees on the way to Monrovia, the capital. Monrovia was named in honor of our former president, James Monroe.

In these days of rising Nationalism and the search for freedom in Africa, it is interesting to note that Liberia has been free and independent since 1847. It was the U. S. Navy and other philanthropic organizations who arranged with the tribal leaders and provided the overseas transportation for the re-settlement of American slaves to return to Africa — later called Liberia (for liberty). Their flag looks similar to the U. S. flag with the exception that it has one large white star in the field of blue (something like Texas). They use U. S. dollars here and the language is English. They have the purest iron ore in the world here. Other minerals, also diamonds, will be reported later.

L. O. MacMurdy,
Kakata, Liberia

Aug. 16, 1961

WHERE DO TEKTITES COME FROM — FROM THE MOON OR MORE DISTANT CELESTIAL BODIES?

By GOTTFRIED FRICKE

Mariasandstrasse 55

Harbolzheim/Breisgau, Germany

Tektites are named after their places of discovery and one speaks of Moldavites, Australites, Bilitonites, Columbianites etc.

In a German book⁽¹⁾ of 1898 I read the following lines: "The Moldavite is a very peculiar jewel-stone as to its origin indeed the opinions differ on this question, whether it is natural lava or the cindery remains of a very old glass industry? The Moldavite is to be found in small pieces half the size of a fist, in embankments of the rivers and brooks of Southern Bohemia in the vicinity of Moldautein and Budweis as well as near Trebschitz in Moravia. — Their color is green with various tints, mostly bootle-green, therefore the name Bouteillenstones and in consequence of the likeness in color also Pseudochrysolithe. They always contain several gas-bubbles and their natural surface is very strangely corroded.

In Moravia the Moldavite is being cut into a national jewelstone. It can be seen in its jewel-form in the jewel-shops of Prague just as well as garnet. From the other jewels, the Chrysolithe and the green Tourmaline, it differs through its lesser hardness and its lower specific gravity. Another difference appears in the small gas-bubbles which are often clearly visible with the naked eye."

Another article⁽²⁾ by the Russian mineralogist A. E. Fersman is also very interesting. He writes: "Four types of meteorites are shown in our museums; the tektites and the three species of real meteorites. The tektites are as clear as glass, varying from black-green to brown or then again to a light-green tint. This way they have been laying in the sand thousands of years, bringing about their frequent surface-corrosion. Ten-thousand of them are in the National Museum of Prague, thousands of them in Chicago and Paris. An exact chemical analysis brought us the composition of the tektites. It is a typical glass, rich with silicious earth, a

high content of Aluminum and Alkalines. They remind us of the composition of the silicious earth rich sands of Porphyry. Generally, they are chemically very similar to our granites. And yet one does not want to recognize them as stones from the cosmos. Some are of the opinion that they are earthly volcanic glass, others that they are artificial cinders of prehistoric human beings, still others believe that they are earthly sand melted through the heat of fallen meteorites. The riddle is still unsolved for there is no proof of their non-earthly origin. On the contrary, the whole universe and all known rocks from the universe possess a different composition and have different chemical characteristics.

Another article⁽³⁾ about Columbian glass meteorites presents more comparative details.

In the towns of Tetilla and Cali spherical forms with grooves and wrinkles of smoky gray color and a tinge of violet have been found.

Their analysis: Specific gravity 2.310.

	Tetilla	Cali
SiO ₂	76.37%	75.87%
TiO ₂	0.11	traces
Al ₂ O ₃	12.59	14.35
FeO	0.48	—
Fe ₂ O ₃	0.26	0.23
MnO	0.14	—
MgO	0.17	0.29
CaO	0.79	—
Na ₂ O	3.36	3.96
K ₂ O	4.67	4.65
H ₂ O	0.97	0.33

A gas-analysis of the two tektites has been made. Ten grams of one of the both tektites were brought to a temperature of 1000°C under vacuum conditions and 8.3 ccm gas were set free. The analysis of this gas showed the following very interesting composition:

	Tetilla	Cali
Methane	2.2 %	—
Hydrogenium	35.3	41.1 %
Carbon monoxyde	24.4	33.3
Carbon dioxyde	27.1	12.6

For reasons of comparison I have also analyzed my own tektite from Stannern/Moravia, called Moldavite.

Analysis: Specific gravity 2.274
Green color with wrinkles and grooves.

SiO ₂	77.89%
TiO ₂	0.10
Al ₂ O ₃	10.17
FeO	1.68
CaO	3.14
MgO	1.12
K ₂ O	3.19
Na ₂ O	0.66

Professor Wimmenauer of Freiburg/Germany has made a "razor-blade" type cut of the Moldavite. Under the microscope this cut is completely isotropic with a few scourges. It seems as if it has no crystalline structure. The chemical analysis shows that the tektites might be relics of granite-bodies.

Permit me now to add some of my own ideas as to known theories about their origin.

As is well known, the moon shows on the side which is turned toward the earth many craters in contrast to the other part. (Picture through the Russian moon-rocket 1959). This proves that the moon has been liquid after its separation from the earth. The gravitation of the earth has influenced the eruptions on the moon before its cooling-off. It probably contains a larger sial-stratum (silicon-aluminum) than the earth. It seems that in this manner substance of the moon-volcanos has arrived on the earth's surface. During the way from the moon through the atmosphere of the earth these rocks melted and became pear-shaped. Upon arrival on the earth these glowing, glassy bodies shrank and got wrinkled.

During millions of years these pear-shaped stones were accumulated in river-

beds but became not water-worn. This way the Bohemian tektites were named after the river Moldau: Moldavites! They were found in the river-sands of the Moldau and the garnet-sands near Trebschitz.

Another idea about their origin is, that the rocks from the sial-stratum of celestial bodies of a greater distance than the moon, likewise arrived on the earth.

However, since it seems that no "arrival" of such cosmic stones has been registered ever since man became interested in their origin, it can be assumed that the tektites sprang from eruptions on the moon.

However, volcanic eruptions on the moon have been finished with its cooling-off, while relics from other stars could have arrived on the earth at a later time and still can.

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AMERICAN FEDERATION

JUNIOR ESSAY WINNERS:

- 1st - \$25 — Valerie Potts, age 12
2538 Reese Drive, Niles, Mich.
- 2nd - \$20 — Betsy Jeanne Smith, age 11½
41 Birch St., Keene, N. H.
- 3rd - \$15 — Stevan Berman, age 11
184 b. 139th St.,
Belle Harbor 94, N. Y.
- 4th - \$10 — Elaine Conner
1604 Blue Bonnet Drive
Fort Worth 11, Texas
- 5th - \$ 5 — Rita Pennypacker, age 12
2240 Eastbrook Drive
Toledo 13, Ohio
- 6th - \$ 5 — Robert Rich, age 14
15 Canal Road, Levittown, Pa.
- 7th - \$ 5 — Alan Murray, age 14
Box 157, Cameron, Wisc.
- 8th - \$ 5 — Bonnie Miller, age 15
1029 Quantico Ave.,
Bakersfield, Calif.

Subject was "Rockhounding in my hobby"

OBSERVATIONS ON SOME OF THE FOSSIL PHOSPHATES OF FLORIDA

By E. J. MARCIN

244 Eadon Lane, No.

St. Petersburg 10, Fla.

Fossil material is common throughout central Florida especially of horn, bone and teeth. These are found most abundantly at the phosphate deposits, but they are also quite common at many excavations or fill sites around St. Petersburg and Tampa. The remains occur in a variety of shapes and sizes, generally rounded and pebble-like as well as those retaining a semblance of their original form i.e., horn, bone or tooth. Much of the material has completely changed to earthy dull or dense compact masses but regardless of the type of change some of the material still shows, in part, original cellular or layered structure.

The colors of this material vary from white to jet black, and the luster from dull to vitreous. Hardness of the compact specimens are between 3.5 and 4.5 mainly 4. Specific gravity determined on numerous samples showed fairly consistent correlation with color. The darker fossils having higher specific gravity than the lighter colored. The S.G. for black material averaged 2.78, brown - 2.76, white or gray - 2.63. The shark teeth were not included in the foregoing figures although they showed similar correlation albeit in greater degree, thus the black teeth averaged 2.92, brown - 2.81, blue-gray (glazed) - 2.73, white or gray - 2.62.

The mode of occurrence of the colors is quite distinctive, purely white specimens are uncommon mostly they have a brownish tinge. Light to dark brown and black are the most frequent. The interesting feature is that these colors are often surface phenomena and the color is not uniform throughout the specimen. Of course some specimens do occur uniformly colored but in the majority of cases only the black will yield such results. The majority of the specimens show concentric sequence of black - brown - white, or black - brown, or black - white, and etc. The darkest color is always the external one, with the exception of what appear to be white these are usually white

only superficially, the interior will be of some shade of brown. The white and brown colored material most often show the original structure i.e., cellular or layered, whereas the black does not, or if it does — not nearly as distinctly. General indications tend to the valid assumption that the black material has undergone greater alteration.

Rough quantitative chemical analysis based on solution of equal quantities in equal volumes of solvent and precipitated by the same normal solutions showed that all of the material had the following elements in the same descending order of abundance: Calcium, and phosphorus, i.e., the material is basically calcium phosphate, fluorine, iron, and water, the iron is probably an impurity. Carbonate content varied, black having most.

Heating the respective materials in a closed tube disclosed the presence of water, basic for the light colored material and acid for the black. The latter also emitted an odor of hydrogen sulfide, curiously this odor of rotten eggs was not detectable when the black material was dissolved in hydrochloric acid, therefore it may be assumed that the sulfur was present only in the insoluble residuum left after the major portion of the sample had dissolved. It should be noted that all of these phosphates are largely soluble in hydrochloric acid, with effervescence (the black most and the white least) and that each leave a residue. The residue from the black material is composed of a black opaque substance and a precipitate of a brown color. The black residue is soluble in nitric acid, so if sulfur was present it would be oxidized to a sulfate, with no emission of hydrogen sulfide. The light colored samples all yield a reddish-brown precipitate. In all instances the solutions are of a yellow color. Unfortunately there are no bona fide quantitative analyses of this material available at present.

(Continued on page 600)

SOME MINERALS FOUND IN GEODES

By MAURICE & CECILE LAMB

Niota, Illinois

The famous Keokuk geode is found in southeastern Iowa; across the river in Illinois and in nearby Missouri. The geodes are found in what is geologically known as the Warsaw formation. I can't give any spot locations because if published in a magazine, the locations would have so many visitors that the landowners would object. I know of good rock locations that have been closed to the public after visiting clubs visited the area on field trips.

Geodes range in size from $\frac{3}{8}$ inch diameter to 28 inch diameter. Local legend has it that geodes of four foot diameters can be found in the area. To date, however, all that I've seen or found have been four foot boulders. Geodes of various and fairly large sizes are to be found here and many of the gardens of the area are enhanced by the sparkling beauty of halved geodes placed as borders. Unfortunately when geodes are opened and crystals exposed to the weather, the geode is soon ruined for the serious collector. And the utilitarian practice of one local man's using the broken halves of a large geode as containers to hold water for his chickens was hardly appreciated by this rockhound!

People are anxious to learn about geodes but sometimes approach rock hunting too literally. One woman, hearing that I was a rockhound, and observing my overly close scrutiny of a rock, asked me to explain what particular odor was associated with what kind of rock. Another couple, apparently destined to become rockhounds, found me hunting the other day and proceeded to ask enough questions to convince me that they knew little if anything about rocks. Noticing that her husband kept loading rocks in a bucket I asked her why they were collecting. She replied that she didn't really know but had seen other people picking up geodes so thought they would too. Of such things Rockhounds are born!

Geodes were formed in the Mississippian Period and accordingly we sometimes

find them still in place in the limestone, which also hold fossils of that period.—crinoids, brachiopods, horn corals and bryozoans. Geodes are nodules that are sometimes found in rounded shapes and hollow. If the geodes are filled with quartz and thereby having no hollow space they are cast aside as duds.

The outside shell of many geode is limestone, then a very thin layer of chalcedony, then quartz crystals coating the chalcedony and lining the cavity. Such a geode with no other mineral inclusion has been called a first generation geode. I believe that any other mineral inclusions found in the geode were formed later.

Small cubic iron pyrite crystals are often found as though sprinkled on the quartz. The cubes have been modified by octahedron in some cases but this fact is not easily observed due to the minute size of the crystals. Occasionally the pyrite is capillary and has the appearance of many little needles—about $\frac{1}{4}$ inch in length. This is the ordinary length but in the Crystal Rock shop at Rushville, Illinois I've seen a specimen of what I believe to be capillary pyrite or marcasite that is almost one inch in length. Iridescent peacock colors of red, blue, and purple pyrite have been found. Pyrite alters to limonite in some cases or may appear as a pyrite inclusion in calcite.

If chalcedony covers the quartz crystals in a very thick coating the specimen is botryoidal. In the event that little chalcedony is present the quartz crystal shape is still apparent showing the quartz crystal termination. Blue or gray indicate a staining with manganese while yellow to brown indicates staining due to iron oxidation upon the chalcedony.

Marcasite inclusions are challenging as well as interesting inasmuch as such inclusions resemble capillary pyrite and because of this are not easily identifiable. Furthermore, both capillary marcasite and pyrite have been mistaken for millerite.

Goethite is found in geodes as a short,

single, black tabular crystal. In the four geodes that I have found containing goethite inclusions, the goethite is a very shiny black and not too hard to distinguish from marcasite.

To open a geode and find sphalerite crystal is a real thrill. Such crystals are black, shiny, complex and often deeply striated; the crystal form is isometric. To the novice rockhound, however, the inclusion looks like no more than black coal—as it looked to me when I opened my first sphalerite crystal geode.

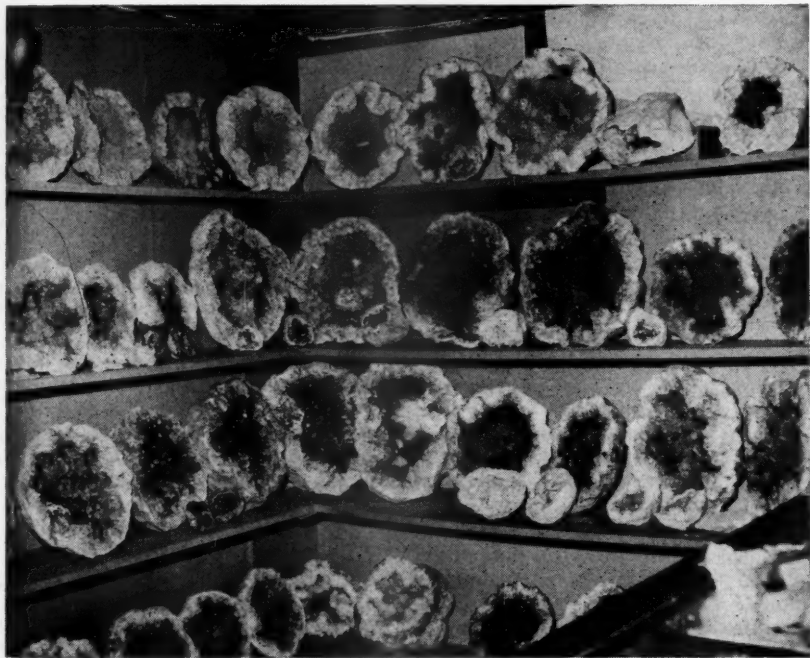
Calcite in a geode assumes many shapes and colors. The crystals have infrequently been observed to be an iridescent brown. My favorite is the pink calcite which is one of the more rare colors also. Certainly there is a wide selection as the colors range from yellow to browns, or appear in a pale translucent white or opaque, or even appear as "phantom". The black coloration is due to oil stain. The local

term for crystal shape is nail head, dog tooth, or cube. The geologist refers to such shapes as simple or flattened rhombohedron although it may be found as scalenohedron.

Dolomite claims interest as the dolomite inclusions can occasionally be found formed in intricate shapes. The crystal occasionally is observed to be curved forming a saddle-shape. Sometimes this pearly inclusion will fill half of a geode. It is found in white, pink, buff and brown. Dolomite alters to ankerite and has been reported to alter to limonite.

Kaolinite is a hydrous silicate of aluminum. It looks like white talcum powder and has been noted in geodes containing dolomite, sphalerite and calcite. Because of the powdery composition, kaolinite geodes have been called "Cleopatra's Powder Box."

Light blue pearly barite roses have been found in some geodes. The few such that



Some of the many fine geodes in the collection of Maurice and Cecile Lamb.

Photo by Elmer Paulis, Burlington, Iowa

I have seen have always been small and associated with dolomite or kaolinite geodes. White to yellow have been reported but I have never seen barite in these colors.

The Will 'O the Wisp of the mineral inclusions is millerite. Like the four foot geodes, millerite is always in the conversations of rockhounds of the area but seems to be no where else. But unspoken in these conversations is each man's resolve to ferret out the elusive millerite. At the first hint of spring in the air the contestants march off to resume the search under the guise of seeking out less spectacular geodes for all of us have become wary after several years of "letting the big one get away." During the warm months millerite is not mentioned as often; why remind each other of defeat. Last summer, though, the piece de resistance was ours! Or so I hope — since it is so rare an inclusion I hesitate to say definitely but right or wrong my find has renewed interest in millerite and this year the search is really on.

Millerite is a nickel mineral that is brassy in color taking the shape of short to long hairs. Some of the crystals that we've found have been coated with something of a black color. It fills the quartz crystallized cavity and is sometimes matted not unlike steel wool. Millerite inclusions have been found in beautiful transparent calcite crystals.

Dew Drop diamond geodes are a form of inclusion that few people have seen. It is composed of very white chalcedony and sprinkled, so to speak, with a very clear, smoky quartz crystal forming a double pyramid with no center shank. The rarity of this crystal shape has led to its being termed a distorted quartz crystal. We are fortunate enough to have a good five inch specimen that we showed in the Burlington, Iowa—Geode Gem and Mineral Club Display at the Decatur, Illinois show last autumn. It is valued highly.

Near our home in Niota, Ill., is to be found one of the most unusual — but not rare as they are not difficult to find — forms of the geode: the Oil Geode. These geodes have oil inclusions and are

somewhat of a mystery as no oil is to be found otherwise in this area. The oil of the geode is rich, black and like oil anywhere has a distinct odor. The oil has been known to burn if ignited, but the geode is of value only to rockhounds. There is one more value to the oil geode, however, and that value lies in the fact that since this type of geode can be found nowhere else in the world, it is Niota's claim to fame.

A good geode collection affords many hours of study. We have found fluorescent aragonite, smithsonite, chalcopryrite, hematite, selenite, and pyrolusite. It has been reported that malachite, tenorite, sulfur, and chalcocite have been found. That will make a total of twenty-four minerals known to occur in geodes. A large unopened geode to local rockhounds is what an Indian mound is to an anthropologist. A thing of beauty is a joy forever.

SPANISH RESORT FOR MINERAL COLLECTORS!

Here is an interesting item from Juan Montal, Plaza Sagrado Corazon 1, Vilafranca del Panades, Spain.

"Due to the large number of mineral collectors from different countries (most of whom are R&M subscribers) who visit Spain and call on me, I am thinking of acquiring a house to lodge them. The house I have in mind would be on the Mediterranean coast where the weather is fine the whole year round and not too far from the most interesting Spanish mineral localities.

"The rates would be low, about \$2.00 to \$2.50 per day (American) — and the house would contain from 10 to 15 rooms or more."

What a splendid idea! A mineral center for Americans and others who may like to do some collecting in Spain. Mr. Montal speaks and writes English, too, and he is also a mineral collector with a wonderful knowledge of Spanish localities. Spain is noted for minerals so a visiting collector should have a field day at every locality visited.

WINDOW SHOPPING IN R&M!

Editor R&M:

Enclosed find check for \$6.00 for 2 more delightful years of R&M.

Wouldn't want to miss one issue. I've had many pleasant hours of reading and "window rock shopping" from your journal.

Mrs. H. J. Carlough, Jr.
RFD 1, Campgaw Rd.
Ramsey, N. J.

FOSSILS IN SOUTH CAROLINA'S LOW COUNTRY

By DR. WALDO H. JONES

Myrtle Beach, S. C.

I have been asked by Mr. Zodac to note a few things about Fossils in the area of Myrtle Beach, S.C., where I have lived for so many years.

The Long Bay area is so named from a great eroded embayment about 150 miles across the mouth and eighteen or twenty deep to the Westward of the Gulf Stream which in this immediate area lies about 70 miles to the Eastward. However the flows of the Coastal Current South of Cape Hatteras as North of Hatteras are Southward but because of a peculiarity of the shape of the Tremendous Hatteras Shoals about 5% of the Labrador Cold Current (that Flows Southward down the NE Coast of the USA) gets by Cape Hatteras and is given a warming trend by the Gulf Stream but is pushed into a counter clockwise flow. Often during NE Storms and Hurricanes this flow becomes a terrific force and is very erosive. I estimate the shallow area of Long Bay at not more than 15,000 years old at the most 20,000. Its origin came as the direct result of some great past catastrophe as described in my article covering this subject.¹ This catastrophe doubtless accounts for the sudden receding of the ice fields to the north and the creation of what we know today as the Gulf Stream.

However when this catastrophe occurred a great and populous variety of Mammalian Life existed all over the world as a remnant of the last Pleistocene period. For hundreds of thousands of years the animals lived and died and were entombed into the flourishing coastal peat bogs. Here we find them today. They are covered by a layer of sands and shells of recent time for 15,000 years is a long time measured in the life of man and animals. But a very short time in Geological measurements.

Below this peat layer we find transitional freshwater gravels but all very small in size. It's however potable water. Outcropping on the Oceanic Beaches.

Lying below this gravely layer we find immense numbers of mammalian sea animal bones such as dolphins and whales. Here we found the great whale jawbone which was a big truck load when we dug it out, after cleaning off the corals and other stuff it yet weighed several thousand pounds. Thus after every great storm or when the tide is very low we try hard to be on the spot and collect the specimens. Strangely if they are washed out by a storm these immense bones are usually found thrown onto the higher parts of the beaches. Thousands of fragments of bones are commonplace on the beach and usually a close hunt will yield many dozens of petrified sharks teeth. However almost all show tumbling action of the waves over the centuries. Below the gravely layers of the coral rocks and usually far below the peat bogs we find cemented into the coral rocks called locally Coquina after the Indian name, thousands of rounded and often very tiny sharks teeth and fragments of manganese and iron impregnated bone surrounded by the crushed fragments and so forth of coral. Often silicified and impregnated specimens of corals are found. Usually not highly colored or as beautiful as the Florida stuff. Many specimens of great shells from this area show definite growth in thickness due to crystallization of calcium compounds into the shells as crystals of dog tooth spar. Some are very beautiful tho often quite small.

In the deep canals of the U.S. Intercoastal waterway we find a wonderful example of cross section of time. Dug over forty feet beneath parts of the Coastal plain we find the picture very clear. However such explorations are not so safe at times. For example the tide must be low, when you see a big boat traversing the canals you had better run for safety. For they throw a tremendous wave onto the very narrow shelf of beach left thru water wash. Here we

can find shells *in situ* direct as they died so many thousands of years ago. Bivalve shells are right there with the muds of ages inside them. All you have to do is dig them out and haul them some 25 or 30 feet up to the ground level of the coastal plains.

Anything that lived and died so long ago can be found in the Pleistocene graveyard. Be careful that mud underfoot while it's hard is also very slippery and you can get a mighty terrible fall, usually backwards onto your aged fanny.

Yes the fossils are here and all you have to do is find them. That's the catch. I have found some marvelous buried corals in the muds of the canals shelf and it's a very rewarding thing indeed to come home with several hundred pounds of specimens.

Reference

¹The Last Pleistocene Age as seen here, by Dr. Waldo H. Jones, **ROCKS AND MINERALS**, May-June, 1960

DR. CHAPMAN JOINS STAFF OF CALIFORNIA DIVISION OF MINES AND GEOLOGY

With the addition of Rodger H. Chapman to its staff, the California State Division of Mines and Geology (San Francisco, Calif.) is inaugurating a new geophysical research program.

Dr. Chapman's last position was with the Columbia-Geneva Division of the U. S. Steel Corporation where he held the title of Senior Exploration Geologist (specializing in geophysics). He holds a B.S. degree in mining geological engineering and an M.S. degree in geophysics from the Michigan College of Mines, as well as a Ph.D. from the University of Wisconsin in geophysics.

Ian Campbell, Chief of the Division, in announcing Dr. Chapman's appointment, said, "His experience in mining geophysics, together with his academic record, combine to make him a well-qualified, able man to initiate and lead a new state program in geophysics."

Portions of the program - now in the planning stage - include, among others, the compilation of geophysical anomaly maps of the state, based on data from private and public sources and a determination of the usefulness of geophysical methods for prospecting for such specific mineral commodities as chromite.

Dr. Chapman resides at 2680 Waverly Street in Palo Alto, Calif. He is married, with 3 children.

VISITING ROCKHOUNDS WELCOME

(Continued from page 564)

- | | | |
|--|---|---|
| Mrs. Kenneth Kitto, Kitto's Restaurant, Paradise, Mich. (Close to Lake Superior agate beds). | Clarence & Arlene Robertis, 10460 Jones Rd., Bellevue, Mich. | William T. Zuehlke, 4442 N. 38th St., Milwaukee 9, Wisc. |
| William & Keith Marjamaa, 1689 Laurium St., Calumet, Mich. | Rex & Lela Hile, 238 S. Richmond, Wichita 13, Kans. | Gary Richards, 111 E. Woolcock St., Jefferson, Wisc. |
| Edward V. Mishell, 23 Colonial Way, Short Hills, N.J. | C. Secrist, 2219 Hershey Ave., Muscatine, Iowa. | Frank Gelen, 1479 W. 58th Ave., Vancouver, B.C., Canada |
| Dr. & Mrs. Jack Nieburger, 24888 Atwood, Sunnymeade, Calif. | Rodney Carlson, 1221½ Second St., Nashwauk, Minn. | Ted Webb, RR 1, Seeley's Bay, Ont., Canada. |
| Mr. & Mrs. Wendel Holbert, 1529 Fair Lane, Manhattan, Kans. | Helen & John Dittmar, Birch Drive, Masonville, N.J. | Herman Kraege, Lima Center, Wisc. |
| Mr. & Mrs. Forest D. Beebe, 404 Hadley St., Holly, Mich. | Eugene Hagedorn, 71 Molar Dr., Bergenfield, N.J. | George and Myrtle Prentice, 585 E. Jackson, Mountain Home, Idaho. |
| The Cutlers, ½ mile north of Kerby Post Office, Kerby, Ore. | Glen Hawkins, 3 miles east & 3½ miles south of Marysville, Kansas | James Arient, 4124 N. Menard, Chicago 34, Ill. |
| Rev. William J. Frazer, 625 Main Street, Moosic 7 (near Scranton), Penn. | Adolph A. Sidla, 201-15th Ave., No., Hopkins, Minn. | Fred Hausler, 705 W. County Road, Hatboro, Pa. |
| | Elliott J. Haddix, Schell City, Mo. | Mrs. Harold Heeley, 16317 Corkhill Rd., Maple Hts. 37, Ohio. |
| | Vernon Sawyer, 13½ Sentinel Rd., Lake Placid, N.Y. | Mr. & Mrs. Roland Patry, 56 Butler St., So. Berwick, Me. |

A HUGE SEPTARIUM FROM WEST VIRGINIA

On the front cover of the Nov.-Dec. 1960, R&M, appeared a photo of a huge septarium with a pretty young girl, Tanya Chapman, sitting on it — just to keep it down! This specimen was found by Tanya's father, Lawrence O. Chapman (41 Church St., Franklin, N. J.), in a shale quarry, 1 mile south of Petersburg, Grant Co., W. Va. Mr. Chapman estimated the weight of the septarium to be around 300 lbs. — much too heavy to lift into his car for transporting it home. There were two septaria each about the same weight and they were described by Mr. Chapman on p. 573 of the Nov.-Dec. 1960 R&M.

The following interesting item, dated Aug. 2, 1961, comes from Howard E. Johnson, prop. Johnson Memorial Co., 313 Front St., Meyerdale, Penn.

"Some month ago R&M had an article on a huge septarium that Lawrence O. Chapman of New Jersey found on his

trip through West Virginia, near Petersburg. I wrote him saying that the next time we would be in Petersburg with our truck we would pick up the septarium and bring it to our shop.

"In the meantime Dr. Price's two boys from West Virginia University (Morgantown, W. Va.) brought in this same septarium to have it sawed and polished. It looked like a big turtle, was very heavy, and we had quite a job unloading it. I sawed it in half and polished each section — they took one section for the University leaving me to keep the other one (from mine I sawed a one inch thick piece for a table top). It doesn't take much of a polish but it does look pretty.

"If any of the fellows have a specimen too large for their saws, tell them to bring it to me and I will saw and polish it."



The huge septarium sawed in two and polished.

The good looking collector examining the sawed specimen is Howard E. Johnson. He did it—the sawing, that is!

NEW HAMPSHIRE HAS QUARTZ IN NOTTINGHAM

By JIM ANDERSON

14 Brook St., Manchester, Mass.

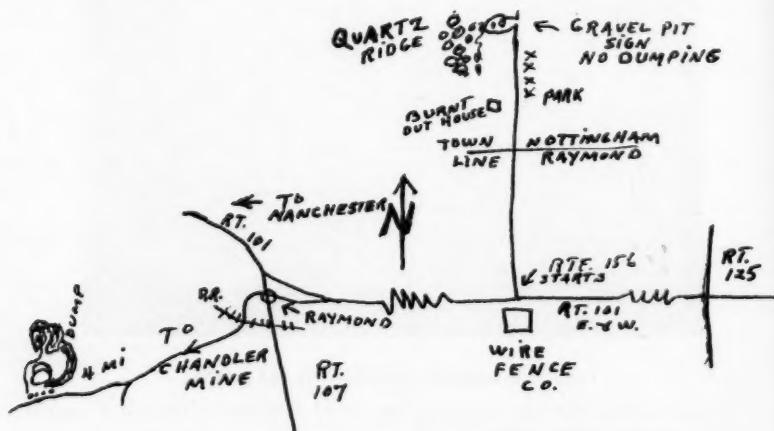
Those who collect quartz crystals, and who doesn't, should visit the quartz ridge in Nottingham, New Hampshire. This area marks the beginning of mineral hunting in the southeastern corner of the state. It is well worth the slight detour on your way north. Route 101 east from Manchester or Route 101 C to 101 west from Routes 1 or 95 will bring you to Route 156. A ten-minute ride will take you to the Raymond-Nottingham town line. On the left, in a clearing, is a burnt-out house. Just at the end of this clearing the ridge begins. A small gravel pit is decorated with a sign prohibiting dumping and if you meet the Sheriff of Nottingham he will only be checking on litter-bugs.

The entire ridge, and there is plenty of it, is covered with milky quartz boulders of all sizes. They are on the ground, underground and partially buried. A sledge hammer, or at least a four pound hand hammer, is essential for breaking these stones. One blow may open a cavity of sparkling crystals. It may take an entire day to break into a large vug. Chisels, wedges, crowbars and shovels are the tools of the day for the serious collectors. Small cavities and loose crystals can be picked up almost anywhere. A handful of

crystals, mostly double terminated, can be found in almost any medium-sized cavity. NO DYNAMITE! Hand labor only. Crystals range from microscopic size to three inches long and up to five-eighths of an inch thick. Many are found in the dirt where they have fallen out of the larger cavities. A thin layer of pink to purple chalcedony covers many of the exposed crystal groups. Larger crystals sometimes have chalcedony flowers on the flats. They are seldom larger than one-eighth of an inch.

There is a tremendous variety of quartzes on the ridge. Hand-sized groups of clear, intergrown, double terminated crystals are often found in the drusy-lined cavities. Single crystals, double terminated crystals, twins and phantoms are found there. Many crystals, like the hound dog and his fleas, have little crystals and they have little crystals and so on down to drusy crusts of micro crystals.

Goethite, in many forms, is common. Some quartz crystals have a beautiful, velvety black coating of goethite and the most interesting specimens, if you are fortunate enough to find them, are the clear, drusy crystals with a handsome pink coating. The first look convinces



Sketch showing the quartz ridge locality near Nottingham, N.H.

the collector that he has found some king-sized rose quartz crystals until he gets out his glass. This is one of the easiest, and best, areas in the east for the collector of quartzes and even a child can find excellent specimens on the ridge.

The Chandler mine, in Raymond, New Hampshire, just a few miles south and west, is well worth prospecting while you are in the area. It is a lithia-pegmatite with a great variety of minerals including beryl, lepidolite, morganite, spodumene and columbite. There were several mines

in the area and they all brought their minerals to Chandler to be sorted. That is the reason for the tremendous dump for such a comparatively small opening.

There are several camping areas, motels and eating places nearby and it's a very short walk, always a pleasure, to the locations. The Planning and Development Commission at Concord, N.H. has a free tourist map that is invaluable to the collector and they also have a very fine booklet on New Hampshire mines and minerals.

Moodus Show Tremendously Successful

July 15th and 16th, 1961 were memorable days for the rockhounds of New England. The SECOND HEART OF CONNECTICUT GEM AND MINERAL SHOW was held at the American Legion Hall in Moodus, Connecticut. This year's show was tremendously successful. Attendance broke last year's record despite threatening rain.

When the doors opened on Saturday, people had already begun to line up for tickets. The dealers were ready with some of the most beautiful specimens seen at any show for a long time. The jewelry exhibited was of exceptional quality and at very low prices. From the patron's point of view, the word was out to "Sell quality — quantity does not count". The dealers represented at our show were: The Brauns of Ridgefield, Connecticut; Fluorescent House; Fred's Gem Den; 1766 House; American Gem Hunter; The Thurstons; Commercial Minerals Corporation; Lawrence H. Conklin; The Gem Cove; World Wide Minerals; The Gallant's Minerals and G & V Jewelry. From these dealers, came fine specimens from the east coast to the west coast — from Canada to Florida.

Exhibiting for competition were the New Haven Mineral Club, our hosts; the Shore Line Mineral Club; Rockland County Mineral Club; Connecticut Valley Mineral Club; Rolling Rock Club; Stratford Gem and Mineral Club and Clifford Trebilcock. The best of show award was won by the Connecticut Valley Mineral Club of Springfield, Massachusetts. Their exhibit was a composite one from their entire membership. The exhibit was truly outstanding. Clifford Trebilcock, who exhibited for the first time at any show, won second place for his personal collection of Maine minerals. The Rockland County Mineral Club won honorable mention. Other exhibitors who had fine displays but were not entered in the competition were Mr. David Seaman of the American Museum of Natural History, New York; Wesleyan University of Middletown, Connecticut; Anaconda American Brass Company, of New York; and the Shell Oil Company, New York.

Lee Laurie who was new to us this year arrived with a trailer called "Luminescent Trails" and parked outside the building so that our patrons could visit the fluorescent Minerals which were displayed inside. Mr. Howard Pate, Fluorescent House, Branford, Connecticut arranged the details. Considerable thanks must be extended to Mr. Pate for arranging such a wonderful exhibit at our show.

Mr. Zodiac's representatives at this year's show were Debbie and Linda Gallant who had a booth which handled subscriptions for ROCKS AND MINERALS. Two subscriptions were given as door prizes and the winners were Miss Eunice Connelly, 54 Adams Street, East Hartford, Connecticut and Miss Toby Engelberg, 1106 Banner Avenue, Brooklyn 35, New York. Neither of the two young people had ever subscribed to R&M before. We hope that they too will enjoy many profitable hours with their new insights to the hobby of collecting Rocks and Minerals.

Althor Products, Mr. J. Kessler, 2301 Benson Avenue, Brooklyn 14, New York donated enough micromount boxes for all our patrons. This gesture went along very nicely with the talk by Mr. Neal Yedlin, Micromount editor of ROCKS AND MINERALS. Mr. Yedlin's talk on Saturday was the highlight of our show. "Around the World in 40X" demonstrated to a capacity audience, the fascinating world of micromounts. The slides shown to our guests were of excellent quality and exceptionally fine. Mr. Yedlin's talk was concluded with slides of the new section of the Smithsonian Institute which houses the geological artifacts of the World. In behalf of all our friends who attended the show, we would like to thank Mr. Yedlin for his generosity in visiting with us and offering us such valuable insights into the realm of "Micromounts".

A film, "The Petrified River" was shown at 9 P.M. to our guests and depicted the Story of Uranium. Booklets were given out through the courtesy of the Union Carbide Corporation, 270 Park Avenue, New York 17, New York. The film was sent to us from

the United States Bureau of Mines, Pittsburgh, Pennsylvania.

Door prizes were given out every hour during the show and consisted of mineral specimens and jewelry donated through the kindness of our dealers. Those people who won and were not in attendance will be receiving their surprises in the mail very soon.

The president's meeting was held and plans were discussed concerning the possibility of New England clubs exchanging information more often. It was also decided that Mr. Charles Wight, President of the New Haven Mineral Club, would contact the clubs in an attempt to locate the names of people in the various groups interested in visiting and collecting in their respective localities. Mr. Wight will be contacting the various clubs soon.

The field trips this year were held at Mt. Tom, Conn., for the collection of beryl and other minerals; at White Rocks, Conn., for uranium ores and beryl. The show committee who arranged the field trips would like however to point out that they were in no way obligated or remunerated by the quarry owners who were running the field trips. We point this out by way of apology to all our friends for the poor collecting at Mt. Tom. We understand that there were problems encountered at the quarry which the committee was not ad-

vised of and want to state here that "The show committee was disappointed with the operation, and lack of cooperation on the part of those in charge. We are advising the owner of this fact and wish to let our friends know that we are extremely sorry for the poor collecting and hard feelings which resulted on this particular field trip." The show committee alone shares the blame and responsibility for setting up the arrangements with the owner and the New Haven Mineral Club had no part in this fiasco. So, please remember that we tried to arrange good field trips but it took very little to spoil what was to be one of the highlights of our show.

The show committee would like to publicly thank the New Haven Mineral Club for its splendid cooperation all during the year when plans and preparations were being conducted. No one knows how difficult it is to prepare and plan for a show of this size. Without dedicated people behind you, it would be an impossible task. Therefore, we wish to thank the New Haven Mineral Club for its cooperation.

Thanks to all our friends for making this year's show a huge success.

Bob Gallant - Lee Parandes - Bill Moreau

Lewis Moore - Vice Chairman

Helen Gallant - General Chairman

COLLECTING AROUND KINGSTON, N. Y.

By ROBERT E. BAKER

31 Oak Street, Kingston, New York

The Hamilton beds of the Middle Devonian system this past summer (1961) has furnished some fabulous collecting on the new Route 209 By-Pass being built north and west around Kingston, Ulster Co., N. Y.

Beautiful pyrite crystals have been found in the rock embankments. They range in size from $\frac{1}{8}$ inch to $\frac{3}{8}$ inch, the majority being the $\frac{1}{4}$ inch to $\frac{3}{8}$ inch range. These xls are in the form of the cube, the cube and octahedron and penetration twins. Drusy crystalline masses are also found. The cubes have a sunken center similar to hopper type halite and with crystallization appearing to have taken place around this center as a nucleus so that in some of the larger specimens, the effect is not unlike that of barite roses in miniature. I have been told that Dana's System of Mineralogy, 4th Edition contains a description of this type of crystal, however I have not yet had the opportunity to personally check this information.

In one rock cut quartz crystals in thin clay seams up to $1\frac{1}{2}$ inch are also found, although the larger ones are usually imperfectly

formed. The smaller crystals are better and working the fingers in the sticky red and gray clayey seams is tedious at best. On the opposite side of this cut is found small pinkish dolomite crystals in the form of druses on the shaly limestone. One specimen of rock yielded dog-tooth spar of nice thumb nail size although some might be considered of micro size. With the dolomite is usually found drusy quartz and nail head crystals of calcite that fluoresce bright red under both short and long wave light, a challenge to Franklin, N.J. calcite.

Still further along this new road under construction was found fossils in profusion, namely horn corals, brachiopods, pelecypods, cephalopods and gastropods.

I almost forgot to mention the sphalerite found in one specimen of pyritic rock. It was never noticed until we used a 10X lens for viewing. The color of yellowish-brown blends in with that of the pyrite. No doubt other specimens were unnoticed because of this.



WORLD NEWS

ON Mineral Occurrences

ITEMS ON NEW FINDS ARE DESIRED
PLEASE SEND THEM IN.

Abbreviations: x!—crystal
fl—fluoresces

xled—crystallized
ph—phosphorescence

xline—crystalline

ALABAMA—Some months ago we received the following item from William L. Hiss, 418 Rosser Ave. East (Professional Bldg.) Bismarck, N.D.

"Calcite as massive vein fillings in the Conasauga shale which show pronounced polysynthetic twinning in hand specimens is found on the south bank of the Coosa River just west of Cedar Bluff, Cherokee Co., Ala., where excavations and construction for new bridge (?) was under way. Trilobites found on river bank a few hundred yards to the west. This area should be collected soon as it is behind a new damsite and probably will be covered with water shortly."

ALASKA—"Green jasper occurring in thick beds is found in the cliffs of St. George Island, one of the Pribilof Islands in the Bering Sea, Alaska. It can be collected in considerable quantity from the beaches below the massive cliffs as pebbles and boulders."—item sent in by Ralph C. Gosse, Albany, N. Y.

ARIZONA—The following item comes from Mrs. H. E. Mallott, Box 262, Pinellas Park, Fla. It reads:

"I was in Tombstone (Cochise Co.), Ariz., a few months ago. It is one of my favorite places although there are no gem stones there as far as I know.

"Local folks are still digging great holes in the old mine there (the Lucky Cuss) hoping for another strike. I brought back some rocks from the mine—sending you a few."

The rocks consisted of tiny brassy-yellow pyrite cubes in grayish quartzite, and grayish chalcedony.

ARKANSAS—"During August, 1960, I had a chance to do some rock collecting in Arkansas. The first place we went to were the quartz pits near Hot Springs (Garland Co.), Ark. Here I found about 40 nice quartz xls ranging in size from 1/4 inch up to 2 inches. One was found in matrix about 2 1/2 inches long and terminated. There were several large boulders lying around so I decided to break one open. I put a chisel in a crack and broke it open. I could see many xls surrounded by red mud (which is native to this pit and very few others we were told). I managed to break apart the smaller section of the boulder to get a few nice specimens. Just could not break the larger section.

"A week or two later we visited a wavellite locality. We spent about 3 hours trying to locate it in one of Arkansas National Forests. Finally it was found about 1.6 miles west of Avant (Garland Co.), Ark. I found about 35 lbs. of the beautiful greenish wavellite including half of a wavellite ball on matrix of brown sandstone whose diameter is about 3/4 inch.

"Practically all of the material collected has been traded away for some very nice specimens."—item sent in by John Hoyer, 577 Hamilton Pl., River Vale, N. J.

CALIFORNIA—From the Mojave Desert (San Bernardino Co.), Calif., we have two beautiful slabs that were sent in by C. T. Brown, 1355 Gladys Ave., Long Beach 4, Calif. The slabs are 3x4 inches in size, one dark brown, the other dark gray. Both are picture palm

wood (petrified wood) and highly agatized.

"This is Picture Palm Wood that I advertise in R&M. It makes beautiful cabs."—on label.

COLORADO — "Many copper minerals of bright color suitable for cabinet displays are to be found on the dumps of the Evergreen Mine, at Apex, (Gilpin Co.), Colo. The ghost town is located in the Mts. near Central City, Colo., and is reached by dirt road from Central City or by road from Hiway between Central City and Nederland. Minerals to be found on dumps are: malachite, azurite, bornite, enargite, chalcopryite, covellite, cuprite. A few pieces of gem quality chrysocolla have been found, but in rare quantities."—item sent in by Don Ingle, Evergreen, Colo.

CONNECTICUT—Bob Gallant (Gallant Minerals), Box 32, Moodus, Conn., sent R&M two very fine loose xls which were found in pegmatite on Turkey Mountain, Haddam (Middlesex Co.), Conn. One is a brown beryl xl $1\frac{1}{2}$ inches long; the other a lustrous black tourmaline xl $\frac{3}{4}$ inch long.

FLORIDA—The cavities of some of the coral geodes found at Ballast Point, Hillsborough Bay, near Tampa (Hillsborough Co.), Fla., are sometimes encrusted with fine grained drusy quartz. Watch for it. Drusy means covered with minute crystals (resembling sandpaper).

GEORGIA — Banded agate and red jasper occur around Ringgold (Catoosa Co.), Ga., we learn from the Spring 1961 *Georgia Mineral Newsletter*, p. 35. The Newsletter is published quarterly by the Georgia Geological Survey, Agriculture Building, 19 Hunter St., Atlanta, Ga.—A.S. Furcron, Editor.

ILLINOIS — "Please advise us as to what this mineral might be, especially the outer coating? It was found in the Rosiclare (Hardin Co.), Ill. fluorite area."—on label with specimen received from Clarence and Arlene Roberts, 10460 Jones Rd., Bellevue, Mich.

The specimen consists of white drusy

calcite xls on amber-yellow xled fluorite. An attractive specimen.

INDIANA — "Herewith is piece broken out of a large jasper conglomerate. As it is a rather unusual shaped piece of jasper I thought you might be interested.

"The conglomerate came from my farm north of Greencastle, Putnam Co., Ind."

"I have picked many conglomerates in fields and in gravel bars here in Putnam County, Indiana."—item received from Walter Reeves, R3, Greencastle, Ind.

What an attractive specimen. It is a 2x3 inch mass of smoky quartz and embedded in its very center is a mass of deep red jasper. The jasper sticks out like a finger, 1 inch on the side and 2 inches long.

IOWA — From a limestone quarry near Ferguson, Marshall Co., Iowa, we have an attractive specimen that was sent in by Michael Papcun, RR 1, Melrose, Iowa.

The specimen consists of a large cleavage mass of brown calcite on gray limestone. The calcite fl. deep yellow (SW), and whitish-yellow (LW).

KANSAS — Mr. & Mrs. John Roder (Roder's Coral Museum), R7, Hot Springs, Ark., attended the big Wichita Gem and Mineral Society Show, held in Wichita, Kans., April 22-24, 1959. While there they did a little mineral collecting—in a small sand and gravel pit on West 21st Street in Wichita (Sedgwick Co.), Kans., Mrs. Roder found a $\frac{3}{4}$ inch purple amethyst pebble.

LOUISIANA — Ken Kyte, Box 161, Covington, La., found an interesting specimen around Rhinehart, LaSalle Parish, La. The specimen is a 3x5 inch quartz geode lined with brown botryoidal chalcedony.

MAINE—"Am enclosing 2 specimens of prehnite found near Calais (Washington Co.), Me., in a new road cut on Route 1, south of Town.

"To my knowledge this is the 2nd

location for prehnite in Maine—the other being in the Grand Trunk R.R. right of way near Portland (Cumberland Co.), Me.”—recent item from Mr. & Mrs. Clifton H. Gray, 137 Veazie St., Old Town, Me.

Beautifully xled, pale greenish prehnite. A most interesting find.

MASSACHUSETTS — John S. Albanese, P.O. Box 221, Union, N. J., sent in an interesting specimen that comes from North Adams, Berkshire Co., Mass. The specimen consists of greenish platy epidote in pinkish microcline.

MICHIGAN — Mathew Koch, RR2, Stephenson, Mich., has been finding some interesting specimens in the fields and gravel pits around Stephenson, Menominee Co., Mich. One of the specimens found is deep black basanite (quartz).

MINNESOTA—“Under separate cover I have sent you a cretaceous pebble. These are found in the cretaceous deposits above the main ore formation on the Mesabi range. The pebbles are found loose or in a conglomerate. Many in the lapidary end of our hobby (I am a mineral collector) consider them a gem material. I have seen a few tumble polished and they look beautiful. The pebble I sent is from a dump north of Hibbing (St. Louis Co.), Minn. There must be millions of pebbles in this one dump.”—item sent in by Richard N. Lake, P.O. Box 361, Chisholm, Minn.

The lustrous, dark brown, $2\frac{1}{2}$ inch long, egg-shaped pebble is limonite. It is a solid mass and should take a good polish.

MISSISSIPPI—“Under separate cover I am sending 3 rocks that I found in Price’s Creek which is about 3 miles west of McNeill, Miss., in Pearl River County. The rocks are agate and petrified wood.

“I am receiving my copies of R&M and can’t wait until each new issue gets to my mail box.

“P.S. Hope my identification is right because I have been a collector for only 2 months now and have yet to see an-

other collector.”—letter dated June 8, 1961, from John Wierengo, Rt 1, Box 26, Picayune, Miss.

The agates are gray, banded pebbles, $1\frac{1}{2}$ inches in diam., and very nice. The petrified wood is a gray sliver, 2 inches long, $\frac{1}{2}$ inch wide, also nice—and it is fl.—an amazing bright orange, LW; (no fl. SW).

When Mr. Wierengo’s letter and specimens arrived we were dumbfounded over what we read and saw then leaped with joy, we were so happy. Here was a man who had been collecting for only 2 months, has yet to meet a collector, found some very nice minerals but the most amazing fact that left us spellbound was that—each specimen was accompanied by a neatly typed label, giving name of mineral, its locality, County, State and even the date when found 6-7-61. We have met individuals who have been collecting for years yet have no idea that a label should accompany each mineral sent out.

MISSOURI—The following item was received from Elliott J. Haddix, Schell City (Vernon Co.), Mo.

“Schell City is located on the Osage River 100 miles southeast of Kansas City, Mo. Our area is rich in Indian history. Arrowheads can be found in most any direction from Schell City. Blue Mound, 4 miles west of Schell City, is an old Indian burial ground: Chief White Hair was buried there. At Lincoln (Benton Co.), Mo., 50 miles northeast of Schell City is found ozarkite (chert)—it is very colorful and makes beautiful cabs. At Warsaw (Benton Co.), Mo., 40 miles northeast of Schell City is an old honey onyx cave whose onyx was mined many year’s ago and used for table tops. Quartz geodes lined with chalcedony can be found 16 miles southeast of Schell City. Shell limestone is also found. Septarium concretions can be found at Rich Hill (Bates Co.), Mo.

“I would like to meet visiting rock-hounds and would show them collecting areas. I will try to answer all letters received and would be glad to trade specimens.”

MONTANA — From Hjalmar Johnson, prop. Lost Cabin Trading Post, Wibaux, Mont., we have 2 attractive, 1 inch diam. gray barite roses.

"Barite crystals, southwest Wibaux County, Mont."—on label.

NEBRASKA — Flat masses of tabular blue barite are found near Lewellen, Garden Co., Nebr."—item sent in by Mrs. Robert Cook, Callaway, Nebr.

NEW HAMPSHIRE — Some few months ago we received the following item from Mrs. Nelson Barter, Rt. 1, South Harpswell, Maine.

"I am sending a small specimen of quartz crystals found in a road cut in the town of Littleton (Grafton Co.), N.H. They were found in a new road construction. On some of the quartz crystals are tiny red crystal shapes. Can you tell me what these red crystals are? Some pieces also had calcite and pyrite crystals in them."

The small red xls are spinel. The quartz crystals are a group of small slender crystals grading from clear (rock crystals) to milky crystals and all on massive quartz.

NEW JERSEY — "For some time I have been going to write R&M about a find I made at Ogdensburg (Sussex Co.), N. J. Last year we drove up to Franklin (Sussex Co.), N. J., then to Ogdensburg to see a friend of mine but on arriving his wife told me that he had gone fishing in a lake above Ogdensburg. We went up to find him and soon my boys and I began to walk around the lake looking for him and also looking at the rocks. I happened to see a large rounded boulder that looked like franklinite and weathered willemite but how could these minerals get here way above Ogdensburg, which is at least 2 miles south of Franklin. I had just gotten the sledgehammer out of the car when along came a policeman and we started talking about minerals. He told me that no minerals were to be found up here, that I should go to the mine dumps at Franklin if I wanted to find something good. I showed him the boulder — it was only

3 feet off the road and in plain sight so that anyone who walked along the lake there could easily see it. Well I took a crack at the boulder with the sledgehammer and the first piece that broke off easily told me it was willemite — not necessary to use a U. V. light — and the black mineral with it was franklinite. The boulder was then broken up into small pieces.

"Just as I finished breaking up the boulder, my friend showed up — coming through the woods. Was he surprised when he saw what I had found. He told me that he had walked around the lake hundreds of times and had never noticed the boulder. The boulder was all rounded as if it had been rolled for some distance so it is possible that in ages past it could have been washed down from Franklin but how did it get up here on top of the hill?

"After giving away some pieces, I put the rest in the car for the long trip home to West Virginia. These pieces were later found to weigh 400 lbs — quite a load for the car. I am sending R&M a piece so the Editor can see for himself what was found." — letter dated April 18, 1961 from Jim Smedley, Mineral Museum, Follansbee, W. Va.

The specimen was received, a 3x4 mass weighing 2 lbs. It is a typical Franklin specimen — mostly black franklinite with smaller amounts of green willemite and red zincite. The willemite fl. beautifully — bright green under LW, but a duller green S.W. The surface of the specimen is pitted and rounded, the fresh broken interior is lustrous black, green and red.

"Franklinite, willemite and zincite — forgot to mention zincite in my letter." — on label.

NEW MEXICO — "I am sending you a few specimens taken from the Terrero Mine, in San Miguel County, New Mexico.

"The mine from which these specimens come is said to have produced lead, zinc, copper, obviously gold and silver, so somewhere in the area there should be something worthwhile. We have been there twice now but we had little time

for collecting. We went the other day planning to stay two days but on the first day it rained quite heavily, with a good sprinkling of hail added, so we could spend only a short time there, and that night it rained us out so that we left in disgust and came home.

"I had an experience while I was there that would have made a good movie sequence. I was up on the side of a steep hill, not the dump, hammering away on a ridge of rock that showed promise of containing vugs that might have crystals. I was standing on the rather steep side of this ridge — just as the rock, a good sized chunk, came loose, my wife spoke from below me. I grabbed at the rock to keep from crunching her with it, lost my balance with my feet slipping on the damp rock, and turned the floppiest flip-flop you ever saw, coming down on one elbow and one knee. I thought the leg was broken, for a few minutes — I almost passed out of the picture from the pain; however when it stopped hurting I found it was not so bad, although I was weak the rest of the day and my knee still is a bit sore." — item dated July 9, 1961, from G. W. Waddill, Box 14, Fort Sumner, New Mexico.

The specimens sent in by Mr. Waddill consisted of dark blue bornite coated by green malachite and earthy, brown cuprite; also dark brown sphalerite with yellowish, brassy chalcopryite and dark blue bornite; also pale brassy-yellow xline pyrite.

NEW YORK — "While on my vacation in New York last summer (1960) I had a chance to do some collecting near the Kingston-Rhinecliff Bridge in Kingston, Ulster Co., N.Y. In the area I collected many shell fossils (both imprints and casts), Calcite xls, and partly clear quartz xls (rock xls) having a black internal quartz xl. Enclosed is one of the few quartz xls I was able to get." — item sent by John E. Ostrowski, 50 Cypress St., Providence 6, R. I.

A tiny loose rock xl was received containing a beautiful phantom, a deep black smoky quartz xl.

NORTH CAROLINA — "I am enclosing a specimen which I would appreciate very much if you would identify. It came from an old abandoned Civil War copper mine about 10 miles S. E. of Burlington (Alamance Co.), N. C." — item from Joseph A. Mawro, 416 Eagle Rock Ave., West Orange, N. J.

The specimen is green prehnite.

OHIO — Not long ago we received a specimen for identification that had been sent in by Mrs. Jerry Stephens, Box 2, Sharon Center (Medina Co.), Ohio. The specimen was a dark brown limonite.

"This specimen turned up when we dug out beneath our house to enlarge our basement." on label.

PENNSYLVANIA — "Here is an item which may be of use in World News on Mineral Occurrences.

"On the last trip (2 years ago) to Friedensville (Lehigh Co.), Penn., by the Mineral Society of Penn., many fine zinc mineral specimens were found. I am sending you some material that I found on that field trip.

Hemimorphite — groups of tiny glassy, white radiating needles.

Greenockite — greenish coatings on fine grained (dark gray, almost black) sphalerite. The sphalerite from here has a high iron content, does not look like the common sphalerite.

"To get on the Friedensville mine dumps you must receive permission from the New Jersey Zinc Co., who at present operate the mines." — item dated June 23, 1961, from William Sherpinsky, 1528 E. Duval St., Philadelphia 38, Penn.

RHODE ISLAND — "Here is a specimen that I found at Copper Mine Hill, Cumberland (Providence Co.), R.I. What is it?" — item received from William Marsocci, 32 Whitmarsh St., Providence 7, R. I.

The specimen is a lustrous, xline, black hornblende. Very, very nice.

SOUTH CAROLINA — "After a concerted drive to locate and identify all of the rocks and minerals to be found in South Carolina and more specifically

in Greenwood County, we reached the total of 50.

"Our minerals run all the way from corundum to beautiful rutiled quartz; from clays to granite to limestone, all three of which are being processed commercially from an odd form of septarian nodules to massive topaz and others.

"I'd like very much to have any interested persons visit me, particularly since I have one of the few rock shops in South Carolina." — recent item from Jim Durst, 109 N. Main, Greenwood, S. C.

Send us another item or two, Mr. Durst.

SOUTH DAKOTA — From the area around Deadwood, Lawrence Co., S.D., we have a beautifully xled, amber-yellow calcite, that was sent in by John S. Albanese, P. O. Box 221, Union, N.J. This is an old specimen — it carries a label (glued to specimen) bearing the name of an old dealer — L. W. Stilwell, Deadwood, S. D.

It fl. pale yellow under S. W.

TENNESSEE — Thomas H. Webb, Linville, N.C., sent in a specimen which he had collected near Watauga Lake, Carter Co., in eastern Tennessee. The specimen is an attractive, brownish limestone.

TEXAS — "I am sending you some small nodules which were found in a small creek bed in Dallas (Dallas Co.), Texas, by Mike and Mark Edwards of Silsbee, Texas. These boys are enthusiastic rockhounds and would look for specimens on the sidewalks of New York or any other place they would happen to be. They reside in east Texas where mineral specimens other than petrified wood are rather rare but they have found selenite, jasper, moss agate, dendrites and other minerals in the Silsbee area." — item dated July 17, 1961, from Fran Schiller, Box 146, Evadale, Texas.

The specimens are very intriguing — small, loose, dark brassy-yellow, globular pyrite.

VERMONT — From a working talc mine at North Windham (Windham Co.), Vt., we have a greenish compact,

fibrous mass of actinolite that was sent in by Mrs. Louise P. Mullen, 24 Chestnut St., Brattleboro, Vt.

VIRGINIA — "Enclosed you will find a specimen that was found embedded in shale near the Shenendoah Caverns, New Market (Shenendoah Co.), Va. We have been unable to determine the means by which the sample was formed. We would appreciate any information that you might supply us with concerning the structure, chemical compounds, and probable means of natural formation." — item dated June 13, 1961, from Daniel Proctor, Manager Shenendoah Caverns.

What an interesting specimen! It is a dark brassy-brown "marble" $\frac{3}{4}$ inch diameter. It is a pyrite concretion replacing coral. Pyrite is a disulfide of iron.

WASHINGTON — Al Thrower, P.O. Box 305, Santa Cruz, Calif., sent in a beautifully polished and most attractive mottled dark brown, gray, white petrified wood paperweight 4x5 inches in size.

The locality for this very fine specimen is Saddle Mountain, Grant Co., Wash.

WEST VIRGINIA — "Regarding your repeated plea for localities in this state, I wish to submit the following information which comes from a friend. Small pebbles of jasper (color or type not known), but reputed to be of good gem quality occurs sparsely in the gravel and soil in the southern part of Mercer County, W. Va." — submitted by Ralph C. Gosse, Albany, N. Y.

WYOMING — The following interesting item dated July 4, 1961, was received from Thos. C. Hassing, 2073 E. 21st St., Brooklyn 29, N. Y.

"My wife and I just returned from a vacation trip through the Yellowstone Valley agate country, the Superior agate area, and the Black Hills. So we learned about agates.

"We had read in R&M about Dubois (Fremont Co.), Wyoming and decided to spend a day there. We followed the courteous advice of Mr. Nesheim and Mr. McKinley and drove out twenty-six

miles to the Wilderness. Working from the path in this area is rough on us tenderfeet from Brooklyn. A gentlemen who was working close by us discovered a massive limb cast. It was too large for a man to carry out so he broke it and gave us a part. It is a beautiful chalcedony with 'bugs' in it like Montana agate.

"Then we received the thrill of our rock-hound life. While I lay on my back recovering from the strenuous exertions on the mountain side and lugging our things my wife went a short distance off the beaten path, up a creek and hooked around with a hand garden tool. She pulled out a ten pound limb cast lined with amethysts! There we were repaid for the whole trip. This will remain with us as a priceless memento of a great trip.

The possibilities in this area are unlimited for true rockhounds."

BRAZIL — "Fine gem quality chrysoprase is now being obtained as a by-product of nickel mining in the State of Goias, Brazil. This new commercial source has checked the long-time scarcity of this prized apple-green variety of chalcedony. The Brazilian material is equal to any in both color and quality." — item sent us by Ralph C. Gosse, Albany, N. Y.

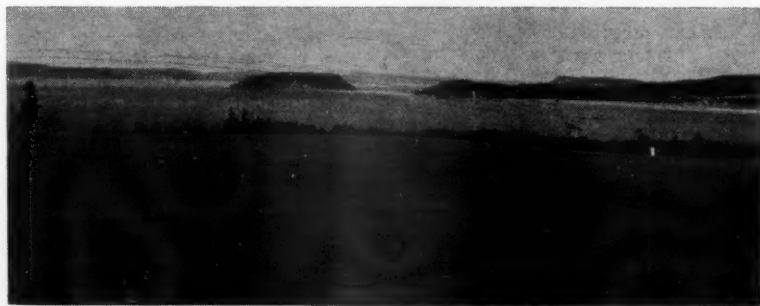
CANADA — The following item, dated July 17, 1961, comes from Capt. & Mrs. Robert Barker, CSC Box 1163, Maxwell AFB, Ala. It was written by

Mrs. Barker (Bob is her husband and Crystal is their little daughter).

"Bob, Crystal and I, along with some mineral collecting friends from Laconia, N.H., had a very successful trip to Nova Scotia, Canada, this June. We followed the advice in Margaret & Dana Rogers article in the March-April 1961 R&M (pp. 126 - 128) and visited Eldon George's shop in Parrsboro, N.S., where we had a delightful trading session.

"We stayed around Parrsboro for our 3-day collecting adventure and camped out on Partridge Island. Bob found an enormous chunk of amethyst about the size of a man's head that has some really deep purple xls although little gemmy material, and the rest of us found small pieces that had evidently broken off the same vein. Bob also came up with a prize chunk of moss agate that is really handsome. We also found excellent specimens of stilbite "wheat sheaves." We were disappointed in the chabazite, but the year before our friends had had excellent luck finding that mineral. We also found nice jasper and gypsum. We had gorgeous weather, enjoyed the camping and dug for clams for an enormous clam chowder. We returned home happy and thoroughly sunburned including Crystal whose poor little nose peeled three times!

"Bob found a nice small specimen of amethyst while skin-diving off Partridge Island so that opens a new field for our collecting activities.



View showing Partridge Island, Parrsboro, N.S., Canada.

"I am enclosing a post card view of Partridge Island."

ENGLAND — "I am sending you two specimens found near my home town of St. Albans, Hertfordshire, England. They are: orange acicular aragonite unearthed during building operations and black goethite cementing coarse yellow sandstone, found in an Eocene sand pit.

"As well as these I have found some good specimens of 'thunderbolt' pyrites in the numerous chalk outcrops of this area. Chalk and its almost constant companion, flint, are very common around here, but unfortunately the chalk is almost entirely unfossiliferous. The flint, however has yielded some nice specimens of micraster and of the brachiopods.

"By far the most interesting rocks found here are erratics (rocks that have been moved from their original by some mechanical force, in this case glaciers). There is a huge range of rock types in this category, ranging from Bunter (Triassic) quartzite to micaceous green phyllite.

"St. Albans is not a very good collecting place, being noted more for its archaeological connections than its abundance of minerals. Nevertheless it is useful as a center for more interesting localities and if you have sharp eyes and a lot of patience you will be well rewarded." — item dated June 16, 1961, from David Wright (13 yrs.), 8 Brampton Rd., St. Albans, Hertfordshire, England.

The orange aragonite fl. greenish-white (LW); pale greenish-white (SW).

The other specimen is a dark brown mass of limonite (called goethite in England).

MADAGASCAR — "The transparent yellow variety of gem quality orthoclase (feldspar) found in a pegmatite near Betroka, Madagascar is usually facet cut, however I find it to be equally fine for cabochons too. When properly oriented, it affords magnificent moonstones having a light golden or silver opalescence of strong character. An occasional stone will sometimes cut a perfect cat's-eye."

— item mailed in by Ralph C. Gosse, Albany, N.Y.

SCOTLAND — Sandy Ramsay, 1015 Aikenhead Road, King's Park, Glasgow S4, Scotland sent in an attractive 2x4 inch sawed slab of dark gray granite. The locality for the specimen is an old quarry (no longer worked) on Ben Cruachan, Argyll, Scotland.

"This slice given to me by John Somerville — from an old quarry on Ben Cruachan.

"At the present moment (April 1961) blasting is going on at Cruachan, a road being made in preparation for the forming of a Hydro Electric dam." — on label.

Ben Cruachan is a mountain in western Scotland.

WALES — John S. Albanese, P.O. Box 221, Union, N. J., sent in a most interesting specimen — glassy-white, xled calcite that fl. a beautiful pinkish-red (L.W.), pale pinkish-red (SW).

"Calcite (Nailhead Spar). Pare Mine, Llanrwst, No. Wales, Great Britain." — on label.

NATIONAL TROPHY WINNERS AT MIAMI, FLA., SHOW, AUGUST, 1961

Mr. & Mrs. Richard Rice, Hillsboro, Oregon were winners of the Woodruff Trophy, which was retired at this show and now becomes the property of the Rices. The competition between the two entries for this award was very close and no one envied the judges who had to decide between them. In accepting the trophy from Mr. Woodruff, Mrs. Rice commented that she was both happy and sad — happy to win and sad that her good friends Adolf and Vivienne Dosse lost.

A PAIR OF THIEVES!

Editor R&M:

The man and wife team, advanced mineral collectors who reside in Gilbertsville, Pa., and who have a remarkably fine mineral, shell and fossil (and gem) collection, and who turned thieves and were caught, missed a case (95 bs.) of manganosulphate specimens, the only pieces available from the now inaccessible locality in Bechtlesville, Pa. Those who might have exchanged or bought this remarkable material from this felonious pair, on their trip to Maine, now have very rare specimens.

Chas. A. Thomas
Royersford, Pa.

THE MICRO-MOUNTER

Conducted by Neal Yedlin—129 Englewood Drive, New Haven, Conn.

This column is being written on September 20th. We attended the Baltimore Mineral Society's fifth micromount symposium last weekend. We know that a full report of this affair will appear in **ROCKS AND MINERALS** in the future, yet we cannot help but comment on the splendid and well organized meeting. During the two day session six speakers lectured on mineralogical subjects (And not exclusively for m/m collectors, either.) on such varied topics as Green River, Wyoming, mineralogy; crystallization of quartz; the origin of lead silicates at Franklin, N. J.; some optical properties of crystals; the creation of art forms in m/m mineralogy; and a potpourri of varied data from collecting in Maine, trillings in bertrandite, to projecting inclusions in muscovite. The speakers were Dr. Charles Milton of the U.S.G.S., Dr. Arthur Montgomery of Lafayette College, Paul Desautels of the Smithsonian, Paul Seel, John Albanese and the writer of this column.

Perhaps some of the major phases of interest are the meetings of old and new friends, discussing the works of the past year, the swapping of material, and the observation and putting to practice of new and improved techniques. One thing was noted by the Messrs. Desautels, Perloff and Yedlin. Rank beginners last year, whose work had been amateurish and "middlin'" in 1960, displayed such improvement, such superb mounts, that they jumped to the ranks and status of "old pros". We think the symposium is primarily responsible for this. Discussion, observation and practice have instilled in the m/m collector a desire to turn out perfect work. He has succeeded.

John Jedlicka, Paul Yaffe and their cohorts, of the Baltimore Society, were responsible for the success and smooth operation of the affair. May their paths

be strewn with rose petals and rare micro xls for the remainder of their lives.

A letter from John Sinkankas in California. He comments on one of the "pegs" in the famous gem tourmaline area:

"I have already been out to the Little Three Mine in Ramona, Calif., and have seen some interesting material which the owner is extracting from the pegmatite. He has been getting the usual dark green tourmalines perched upon cleavelandite; also topaz crystals, some up to two inches in length. The most interesting item he recovered was hambergite in which a mass of the mineral had been recrystallized on one surface in reticulated twinning strongly reminiscent of rutile. The best specimen was spotted at the owner's house and it was requested that it be sent to the Smithsonian. I now have received a copy of a letter from Dr. Switzer in which he states that the material was a welcome addition to their collections."

John found hambergite at this locality some years ago. A rare mineral ($\text{Be}_2(\text{OH})\text{BO}_3$), it occurred in micro xls on feldspar, and we were fortunate in obtaining a specimen from him.

We've just been startled by a totally different habit of zincite. Anthony J. Di Donato, 2918 So. Broad St., Philadelphia, Pa. supplied some synthetic zincite, obtained from the flue linings of a smelter, where the mineral was deposited from hot gasses. Zincite, in nature, is hemimorphic, with the base and pyramid dominant, and an occasional minute prism, as a horizontal line, showing. The synthetic zincite is different. It is orange

red (some yellow) in color, transparent, and shows long first order prisms and second order pyramids. No sign of hemimorphism is present, for the prisms emerge from a small mass of zincite and are not doubly terminated. The material photographs beautifully.

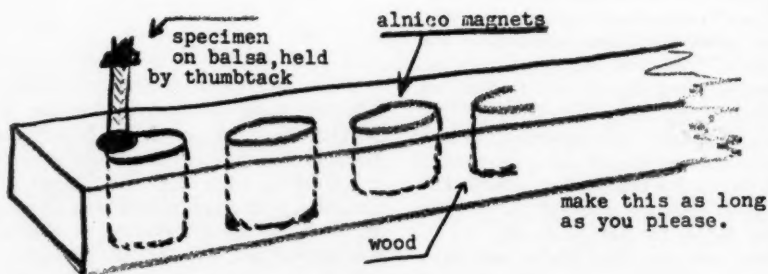
We do not, normally, advocate acquiring synthetics as part of a m/m collection. The definition of a m/m includes the words "natural mineral". But for the purposes of study, for crystal comparisons, we feel such items are useful.

Some time ago we described Phil Cosminsky's method of using a cylindrical alnico magnet to support balsa pedestals while freshly cemented specimens were drying. You know, a thumb tack stuck into the bottom of the balsa and then placed erect on the flat of the magnet. About 6 specimens could be so taken care of. Phil wasn't satisfied. Now he's created a rig that will handle as many as wanted. A block of wood is drilled and half inch magnets inserted. Each magnet will support 4 mounts. Make as many as you like. The sketch will give the idea.

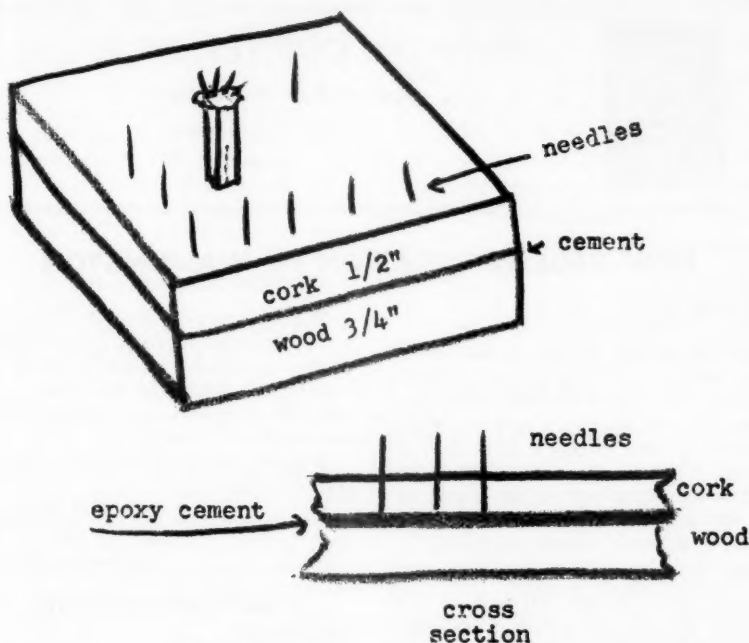
Another trick that works well is a cork, wood and needle affair. Cut some needles so that the pointed ends are about an inch long. Cut a block of wood, $\frac{3}{4}$ inch stock, about 6 inches square. Stick the needles through a 6 inch piece of cork, half inch thick, so that the needles are an inch apart in all directions, and the bottoms of the needles are flush with the bottom of the cork. Coat the wood surface with epoxy cement, place the cork sheet on the

wood, needle points up, of course, and in 24 hours you're in business. Bill Hunt, of Valley Forge, Pa., gave us this one.

We spent a September weekend in Maine, visiting with Mildred Snyder at Randolph, and showing some slides of m/ms at the club meeting at Winthrop. Later, at Topsham, we dropped in on the Trebelcocks, and saw the best rose quartz xls ever, from Newry. Some superb tiny ones now grace our collection, showing phantoms and sceptre xls. From Topsham were fine black anatase specimens on decayed albite, and a bottle of loose xls, which young Kip had panned from the sands. But best of all were uraninite xls, also from Topsham. They occurred as individuals, from micro to almost 1 inch across, in a feldspar, heavily seamed with biotite. The xls grew against the mica, and now present an interesting study. The pegmatite magma, in cooling, crystallized out, in order, the minerals with the highest melting point. Biotite was first. The uraninite came next, and seemed to butt against the mica, and whenever this occurred the xls are flat and distorted at this contact point. For the rest, the uraninite formed in the molten spar, and formed perfect, brilliant, and highly lustrous octohedrons. The spar cooled last, surrounded the now-formed uraninite, and acted as a protective coating. And this raises the question of alteration. There seems to be little, if any, halo, or radioactive "sunburst" in the feldspar in contact with the pitchblende. Why?



Phil Cosminsky's magnetic rig.



Bill Hunt's cork, wood and needle trick.

Those of you who attended the Connecticut show at Moodus saw an exhibit of the material. There were, too, specimens of samarskite and monazite.

For years collectors have bemoaned the fact that the Topsham, Me. locality was

barren, exhausted, "dead". Yet good collecting turned up some wonderful things. Go thou and do likewise.

Buy and use a good mineral book.

ANY MINERALS TO SPARE,

We are two pebblepups who would appreciate receiving small packets of minerals from anyone who would care to send them. We sent minerals to the children mentioned in the last issue of R&M. We are 7 and 10 years old.

Scotty Lough (10 yrs.)
4515 W. Weldon Ave.
Phoenix 31, Ariz.

Claudia Lough (7 yrs.)
4515 W. Weldon Ave.
Phoenix 31, Ariz.

LOVES EVERY PAGE OF R&M!

Editor R&M:

I just can't help myself in replying to the man who a few months ago complained that R&M was not technical enough for him. Let him read *text books* and leave *our* magazine alone. We (the amateurs) would be lost completely if it was technical. I love every page of R&M (just as it is) ads and all. So don't ever change it. For the few who gripe there are hundreds who love R&M just the way it is and we certainly don't want it to be *so technical* it's over our heads.

Betty McCarty
5824 E. 12th St.
Kansas City 26, Mo.



WOMEN'S CORNER OF R & M

Conducted by Winnie Bourne

c o Rocks and Minerals

Box 29, Peekskill, N. Y.

NEW ZEOLITE LOCATION IN WASHINGTON

Dear Winnie:

We have been as busy as two beavers this summer and past winter getting a display room ready for our many minerals. We are hoping a number of the visitors to the World's Fair here in Seattle will also be mineral collectors and will look us up, as we always enjoy talking and swapping rocks altho so far it has been mostly purchasing.

We hope all your readers who have written me will have patience as it is a long job of unpacking rocks some of which have been in storage for twenty years and as we get them all out will be only too happy to trade as they have asked about in their letters.

We have visited a new zeolite location and as the crow flies not too far from our place except it entails crossing two ferries to the Olympic Peninsula. There is a basalt outcropping not far from the new Hood's canal bridge. As a matter of fact the quarry rock was used near the shore line for the bridge so some zeolites can also be found where the rock was dumped. Some can easily compare with Springfield, Ore. location. We found one tuft of natrolite about an inch and a quarter in length sprinkled with what appears to be tiny black botryoidal blobs of manganese. Many of the geodes were hollow and lined with manganese and one was filled with what appeared to be water, which we broke, unfortunately. Several more seem to have water in them but we cannot see into them to know for sure but specific gravity seems to change from end to end as it is shaken.

We did not spend more then two hours at this location which involves breaking up the big basalt boulders but those who have spent some time there have come out with some very nice zeolites of various kinds.

Wishing you lots of success in the new year to come.

Mrs. L. R. Haggard
6525 - 196th S. W.
Lynnwood, Wash.

IT WAS SAND YOU WANTED!

Dear Winnie:

I must tell you about my experience in getting some sand from the Rio Grande at Matamoros, Mexico. The bridge is fenced for a distance on both sides and the entrance to this enclosed area is thru the Mexican Customs Station. Not wanting to get shot or shot at, I asked permission and was sent to three different officers. The last one listened patiently as I tried to explain what I would like to do. From his questions and comments it did not seem that he understood me. I carry small medicine containers with me and showed him I just wanted to get that much sand. After about so long he said I could go.

When I came back I stopped and showed him what I had. You should have seen and heard him laugh. "It was sand you wanted," he said. "I thought you wanted to get something for medicine to send to somebody, and all you wanted was sand." That was why he could not understand what I wanted. Everybody laughed and as we left to cross the bridge he was relating it to the other officers and they had one big laugh over it.

They no doubt had had it for that day. Just what those Americanos would ask for next! Can't you imagine some of their remarks? But I got the sand — one sample of which was sent to the Sand Collector of R&M. (See May-June 1961, R&M, p. 257).

Mrs. Clara Roder
R 7 Box 68
Hot Springs, Ark.

YOUNG SON INTERESTED IN ROCKS

Dear Winnie:

I want to take the time now to tell you how much we enjoy R&M.

My son is only 8 years old and has been a rockhound since he was 5½. When he was in kindergarten his teacher told me that he had a mature knowledge of fossils. He is very interested in all rocks and minerals. As a matter of fact he got me interested in them also. Before that everything was just a pretty rock. Now he enjoys your magazine as much as I do.

Mrs. Charles Tellerday
Meredith Rd.
Delhi, N. Y.

SOME NOTES ON TASMANIA

By RON LAMPERT

The Hutchins School, Macquarie St., Hobart Tasmania, Australia

When you say that I am the only one to write you from "my country", do you mean from Australia as a whole, or just Tasmania? I ask you this because there is a tendency among people in other parts of the world to regard Tasmania as a separate country instead of a state. It is unlikely that you would receive many enquiries from Tasmania as it has a population of only 300,000, and I know of only a couple of other adult rockhounds; there are no clubs or societies here, indeed the only society in the whole of Australia is, to my knowledge, the New South Wales Lapidary Club, which has about a thousand members. There are only two or three firms that lap and polish Australian stones on a commercial basis, and their market is very limited.

I am interested for several reasons; one being that I am a science master at this school where I have an active group of boys interested in minerals; another is that I recently have been buying a few stones from overseas for sale here and was considering seeking an overseas market for Australian stones, baroque stones in particular, hence my enquiry about advertising rates in R&M; my greatest reason however is that I am just interested.

Geologically, Tasmania largely consists of dolerite intruded among older sedimentaries of ages ranging from Cambrian to Permian (mainly). Towards the

west coast there begins a zone of metamorphism, the main rock here being quartzite. It is in this zone that most of Tasmania's commercially exploited minerals are found — copper, lead, silver, gold, tin, tungsten, molybdenum and asbestos. In other parts are alluvial deposits of gold, tin, osmiridium and titaniferous sands.

The Permian mudstones are in parts rich in fossils, mainly *Fenestella* and *Spirifera*, with a few Gastropods such as *Platyschisma*. The whole island has been glaciated three times and the dominant rock is dolerite, thought to be of Jurassic age.

Unfortunately, I live in the south-east and the more interesting minerals are in the north and west. I shall send R&M some samples of local mineral fairly soon, but you may have to wait a few months before I can obtain others. Locally I can obtain some of the sands, also a few fossils and ordinary rock samples. The agates I have found are not good specimens, being mainly shattered fragments, but I will send along a piece. Zircons are found only in the north-west, and amethysts are not found at all. Opalised wood is fairly common but not always readily obtained. The rare and famous Tasmanian minerals, Crocoite and Stichtite, are now practically unobtainable since the mine at Dundas closed down.



THE SAND COLLECTOR

CONDUCTED BY PETER ZODAC
PEEKSKILL, N. Y.

Serpentine sand from Willow Creek, Calif.

"You will find enclosed a sample of sand from a beach in Monterey County, Calif., near Willow Creek, about 35 miles north of San Simeon, on Highway #1.

"I'm not a sand collector so do not know how much sand is an adequate sample. Hope this is enough for your purpose. This sand was collected while I was looking for nephrite jade pebbles on the beach near Willow Creek, one of the areas well known among California rockhounds as a source of jade. This was over a July 4th weekend, and there were many rockhounds at the beach. However, I did get some nice specimens of green and white serpentine which although soft can be polished.

"This sand is different in composition from that on most California beaches. I'm sending this sample because it may be unique." — letter from Edward C. Johnson, 10 B Ironwood Drive, Twentynine Palms, Calif.

A handful of sand was sent in by Mr. Johnson — a very generous amount. The sample is a coarse grained, dark gray sand consisting chiefly of dark gray limestone with small amounts of green serpentine, white calcite, and a tiny amount of black magnetite.

Ant Hill sand from Salida, Colo.

For this interesting sand sample we are indebted to Irene M. Kitt, owner of Chain 'O Lakes Rock Shop, 515 N. Orange St., Albion, Ind. The sample is a coarse grained, pinkish sand. It consists chiefly of pinkish feldspar with smaller amounts of smoky quartz and

dull black magnetite. Some of the smoky quartz are rounded black grains but when broken open the inside is gemmy and colorless — very odd.

"Sand from ant hill at Ruby Mt., Salida (Chaffee Co.), Colo." — on label.

Shell sand from Lumahai Beach, Hawaii.

Mrs. G. D. Wiebe, 310 Beech Ave., Mamaroneck, N. Y., collected this sand sample for us while on a recent visit to the Hawaiian Islands. The sample is a medium grained, brownish sand consisting chiefly of sea shells (brownish, white, pink) plus a little gemmy green olivine and a little dull black magnetite.

"Sand from Lumahai Beach on the north shore of Kauai Island, one of the Hawaiian Islands." — on label.

Chalcopyrite sand

from Patterson Creek, Idaho

"We are mailing a sample of sand that we thought would be of interest to the Sand Collector. The sand comes from the property of a tungsten mine in central Idaho. The fine white quartz particles blow away, leaving coppery colored crusts on the "waves" — quite a striking scene. This sample was skimmed from the "crusts" so contains a high percentage of the ore." — letter from Mr. & Mrs. Fred Sellers, 1241 Houston, Idaho Falls, Idaho.

The sample is a coarse grained, brassy-gray sand consisting chiefly of brassy-yellow chalcopyrite and smaller amounts of brassy-yellow pyrite plus very small amounts of black magnetite, smoky quartz, gray scheelite (fl. blue). and colorless zircon (fl. orange). The chal-

copyrite is in rounded grains; the pyrite in cubes some of which show rounding.

"The location for the sand is Patter-son Creek, Lemhi County, Idaho. Access is difficult, due to discontinuation of mining operation on the site and a steel gate which is kept locked.

"Hope we can be of service at times to sand collectors, rock hounds, or to R&M." — on label.

Garnet sand from New Egypt, N. J.

"The enclosed sand comes from a farm near New Egypt (Ocean Co.), N. J. Many grains fluoresce orange, so may be zircon." — sent by Merton McKown, 22 Pergola Ave., Jamesburg, N. J.

The sample is a very fine grained, reddish-black sand consisting chiefly of reddish garnet, plus smaller amounts of lustrous black ilmenite, colorless quartz, colorless zircon (fl. orange), brownish monazite, and a tiny amount of lustrous black magnetite.

River sand from New Bern, N. C.

"The Neuse and Trent Rivers join a few blocks from where I live. The enclosed sand sample is from the Neuse River." — sent in by Mrs. Alma B. Davis, 608½ Pollock St., New Bern, N.C.

The sample is a fine grained, gray sand consisting entirely of colorless quartz.

"Sand from Neuse River, New Bern (Craven Co.), N. C. From a fossil location." — on label.

Quartz sand from Antelope Mts., Okla.

This is a fine grained, yellow sand — all yellow quartz plus a tiny amount of black magnetite.

"Sand from Antelope Mts., Ellis Co., Okla." — on label of sand sent in by Mrs. A. H. Huckaby, Box 126, Selman, Okla.

River sand

from Cumberland River, Tenn.

"The enclosed sand is from shore of Old Hickory Reservoir — the damming up of the Cumberland River in Davidson County, near Nashville, Tenn., where we

are vacationing." — sent in by an anonymous reader of R&M.

The sample is a fine grained, brown sand consisting almost entirely of quartz (chiefly brownish, some colorless) except for a tiny amount of black magnetite.

Olivine sand from Fife Bay, Papua

Papua occupies the southeastern section of New Guinea, the world's largest island. Papua is north of Australia.

From Fife Bay, near the extreme southeastern tip of Papua, we have a sand sample that was sent us by Max Halock, Pago Pago, Tutuila, American Samoa.

The sample is a dark green, fine grained sand consisting almost entirely of dark green, gemmy olivine. A small amount of white sea shells and a tiny amount of black magnetite also present.

"Sand from Fife Bay, Papua, about 40 miles from Samarai (located on the extreme southeastern tip of Papua)." — on label.

Beach sand from Sea Cliff, Scotland

Seacliff, on Seacliff Bay, is on the southeastern coast of Scotland. The locality is a few miles southeast of the ruins of Tantallon Castle, once the stronghold of the Douglasses. From Seacliff we have a sand sample that was sent us by Sandy Ramsey, 1015 Aikenhead Rd., Kings Park, Glasgow S4, Scotland.

The sample is a medium grained, reddish-brown sand. Consists chiefly of quartz (smoky, colorless, reddish, brown jasper) and sea shells (white, brown, bluish — many of the white shells are opalescent). Some pinkish feldspar and black magnetite also present.

"Sand from Seacliff, East Lothian, Scotland." — on label.

River sand from Sart, Turkey

From Mr. Donald B. Eddy, a former American Consul at Izmir, Turkey, we have an interesting sand sample that comes from the Pactolus River at Sart, Turkey. The following letter from Mr. Eddy was enclosed with the sand:

"The enclosed sample is river sand from the Pactolus at Sardis, ancient capi-

tal of the kings of Lydia, now a Turkish village called Sart. Here Croesus, greatest of the Lydian kings, first invented coinage. In his book, "THE LOOM OF HISTORY", Herbert J. Muller has the following to say about this site:

"In Homer, the Lydians appear as the 'Maeoneans', Trojan allies who came from 'beside the Gygean Lake' under Mt. Tmolus in the Hermus River valley. Aside from this broad, lush valley the chief source of their proverbial wealth was the gold dust washed down from Mt. Tmolus in the stream Pactolus, which flowed through their capital of Sardis, (King Midas had been cured of his golden touch by washing in the source of the Pactolus)."

"Sardis fell to Cyrus, the conquering Persian emperor, in 547-46 B.C. Presumably, Cyrus and his successors went on panning the gold dust out of the Pactolus where Croesus left off. One is naturally tempted to hope that the gleaming flakes which appear in this sample from the Pactolus are also gold. But one must also acknowledge that the complexion of the sand bars of the Pactolus may just possibly have altered in the 2500 years which have elapsed since the heyday of Croesus. So I am resigned to your finding that this is just fool's gold after all."

The sample is a fine grained, dark gray lustrous sand consisting of silvery-white muscovite, smoky quartz and gray feldspar. No gold present but the lustrous muscovite (mica) might deceive a novice into thinking that it is silver.

Sart is about 50 miles east of Izmir, a seaport city on the west coast of Turkey.

ENHYDROS

A subscriber writes about finding water in chalcedony but the only way to learn for sure is to break open the geode — but in this way the water is lost.

Do not break such a geode—shake it close to the ear and if water is present you may hear it splash inside. Then DO NOT break it open — leave it as is. You may then show your friends a prize specimen by letting them hear the splashing. A chalcedony geode containing water as above is called an enhydros.

PICKEN'S MINERAL POST CARD DEPARTMENT

Reo N. Pickens, Jr., 610 N. Martin, Waukegan, Ill., one of our good advertisers, is a photographer whose hobby is mineral collecting. For many months we have been receiving from Mr. Pickens post cards of minerals in color which he himself had taken. These mineral post cards are so beautiful, and with new ones coming out every month, that we have decided they deserve a spot all their own in R&M and so Pickens Mineral Post Card Department is set aside for them.

"I enclose my latest cards" — item dated Sept. 12, 1961, from Mr. Pickens. The cards are very beautiful. They are as follows, with captions:

- 34—Apatite Crystal Twin. From Huddersfield, Quebec, Canada. A phosphate of calcium and fluorine, brittle and has a hardness of 5. About actual size." — 1 dark brown crystal.
- 35—"Grossularite Garnet Crystal. From Topsham, Maine. A calcium and aluminum silicate with a hardness of 7½. Smaller than actual size." — a large dark red crystal.
- 36—"Tourmaline Crystals. From the Himalaya Mine, Mesa Grande, California. A complex silicate of boron and aluminum with a hardness of 7½. Almost actual size." — three green and pink crystals.
- 37—Hematite. Pseudo-Cubic-Cleavage. From Franklin, New Jersey. An iron sesquioxide with a hardness of 6½ showing a parting lamellar structure. Almost actual size." — grayish mass.
- 38—"Fluorite crystals on Quartz. From Rosiclare, Illinois. Calcium fluoride, brittle and has a hardness of 4. About ½ actual size." — group of purplish and white crystals.
- 39—"Fluorite Crystals. A bi-color group from Rosiclare, Illinois. Calcium fluoride, brittle and has a hardness of 4. About 2/3rds actual size." — white and purplish-red group of crystals.

WANTS TOURMALINE CRYSTALS

Walter E. Nydegger, Box 198 RD 1, Elkins, W. Va., is in the market for good tourmaline crystals (wholesale lots for resale — not for tumbling).

FOSSIL PHOSPHATES FROM FLORIDA

(Continued from page 575)

The data indicates that the fossil remains are probably of the apatite series variety of colophonane.



Fossil Department

Short items on fossils and their localities are wanted.

Please send them to the

Fossil Department (Rocks and Minerals), Box 29, Peekskill, N. Y.



CALIFORNIA — "Just in from a three months trip and a million things are clamoring to get done (as usual).

"Located some nice fossil sand dollars specimens near Coalinga (Fresno Co.), Calif."—item dated Sept. 5, 1961, from R. A. Richards, Box 44, Morristown, Ariz.

KENTUCKY — "On our last trip to the Birdsville quarry, located about 2 miles southeast of Birdsville on State Hiway 137, in Livingston County, Ky., we found a small crinoid calyx, and a portion of a larger one, plus a goodly number of pentremites.

"By the way, I am on the trail of some very large pentremites. An acquaintance of mine from Illinois presented me with one about the size of a hen's egg, but he is extremely vague about where he finds them." — item dated Aug. 27, 1961, from H. G. Oliver, Route No. 1, Hickory, Ky.

MARYLAND—"Just south of Chesapeake Beach (Calvert Co.), Md., are the Randall Cliffs. These cliffs are composed of sand and clay. The cliffs are slowly being worn down revealing shells and bits of bone in clay. Some of these are old, some are recent. There is almost



The three Oliver boys at the Birdsville, Ky., quarry—left to right, Buster (age 8), Bill (age 14), and James (age 13).

no way of telling because most of the clay is moist.

"There is a place where a tree has fallen bringing with it a lot of clay and sand. This has formed a pile debris over six feet high. At the top of this pile you can see a number of small shells in the clay.

"There is a place where water has cut far back into the cliffs. Here in the clay is some sand with clay and small shells which is forming coquina.

"When the water seeps down through the sand and hits the clay, the water seeps out making the clay very wet. There are numerous bugs and flies on the beach. There are about ten places where flies and insects are getting caught in the moist clay.

"In places where there are trees and small plants have fallen down, the plants and trees are covered by the water and sand and will eventually become petrified.

"Many shark teeth can also be found there. They range in size from about $\frac{1}{8}$ of an inch up to 3 inches.

"In the cliffs south of Chesapeake Beach, an end of the vertebra or centrum of a porpoise has been found. This is a small disk 2 inches in diameter and $\frac{1}{4}$ inch thick. It was identified by the Smithsonian Institution, Washington, D. C." — this interesting item, titled Fossils in Formation, was sent in by Bruce Houston III, 5133 Worthington Drive, Washington 16, D. C."

NEW YORK — "In the Fossil Department of the January-February 1957, R&M, issue fossil hunting in the Greene County of New York State was discussed. Following the directions I visited the Austin Glen area and found it very rich in fossils, as stated. One of the best areas I found was on the Catskill Creek and in the near area. For more information the mentioned article should be referred to.

"Another interesting site I found was about a quarter of a mile from the western approach to the Rhinecliff-Kings-ton Bridge over the Hudson. Here the

quality is not excellent and the quantity not too profuse, but ten minutes of poking unearthed, besides numerous shells, a small but nice trilobite and several baculites and specimens of coral. Two separate sections of the well differentiated strata are exposed, both being over a hundred feet in length and a height of twenty to thirty or forty feet. It has a great advantage; there is an area along side the strata where one may easily and safely park! For anyone living in the area it would be rewarding to visit and as well the other exposed strata in the area."

Roger Sassen
8021-231 Street
Queens Village 27, New York

OHIO — Robert M. Maher, 1149 Parkway Dr., Columbus 12, Ohio, sent in some very interesting fossils consisting of small fish teeth and bone fragments (all brownish) in dark gray limestone.

"Mid-Devonian fish teeth and bone fragments from famous Bone Beds located in first nine inches of Columbus limestone underlying the Delaware limestone. Marble Cliff quarry Columbus (Franklin Co.), Ohio." — on label.

TENNESSEE — James T. White, St. Luke's, Sewanee, Tenn., sent in some interesting fossil specimens. The fossils are dark gray fern leaves embedded in dark gray shale.

"Carboniferous fern leaves which occur in the shales near Tracy City (Grundy Co.), Tenn. These were collected on March 3, 1961." — on label.

WEST VIRGINIA — "Here is an item on a fossil Cordaite leaf that I found on a coal strip job between the towns of Clarksburg and Bridgeport, in Harrison County, W. Va. The find was made on Dec. 20, 1959.

"I found part of it in the high wall on top of the coal seam. It was late in the evening, went back the next day and recovered more of it. It has turned to stone that is full of marcasite with several plates of marcasite on it. I am enclosing

a drawing of the leaf."—item sent in by A. H. Peet, Rt. 2, Box 291, Clarksburg, W. Va.

From the drawing the leaf is 30 inches long and $3\frac{1}{2}$ inches wide.

TRINIDAD — "Cenozoic and Cretaceous Echinoids from Trinidad and Venezuela", title of a 35 page report (with 14 plates) that was issued Aug. 18, 1961 by the Smithsonian Institution, Washington 25, D. C. The author of the report is C. Wythe Cooke, Research Associate, Smithsonian Institution.

VENEZUELA — See Trinidad, above.

UNITED NATIONS CONFERENCE ON NEW SOURCES OF ENERGY

James R. McNitt, staff geologist with the California State Division of Mines and Geology, has returned from Rome where, in the latter part of August, he participated in the United Nations Conference on New Sources of Energy. The conference was open to participation only by invitation of the United Nations Secretariat; participants hailed from many nations of the world. Dr. McNitt presented a paper entitled "Geology of the Geysers Thermal area, California". Although other thermal areas in the United States are under development, California presently has the only producing geothermal power plant.

The purpose of the Rome conference was to bring together scientists working in the fields of solar energy, wind power, and geothermal energy in order to provide the participants with up-to-date information on progress achieved, and to publish an exchange of views and experience relating to practical problems, potentialities, and limitations in utilizing these three source of energy. The ultimate objective of the meeting was to supply the most recent and accurate information concerning these low cost energy sources to the numerous underdeveloped nations of the world.

In the field of geothermal power alone, the conference resulted in the publication of over 70 papers on the exploration, development, and utilization of natural steam for geothermal power. The various projects described in these reports include geothermal power developments in New Zealand, Iceland, Italy, Mexico, Japan, El Salvador, and the western United States.

Dr. McNitt, who holds a Ph.D. from the University of California, is a resident of Berkeley, Calif.

FREE FOSSIL CATALOG

"Enclosed is my latest inventory of fossils which shows, perhaps, over 700 varieties in stock at moderate prices.

"This enterprise grew out of a hobby which I shared with my children. Now, our collecting has an additional function, for we exchange Maryland and Virginia fossils with correspondents all over the country.

"Several museums have commented very favorably on items received from us.

"This list is available at no charge to interested readers of R&M."

Donald Malick
5514 Plymouth Road
Baltimore 14, Md.

PUBLISHING HOUSES MERGE

New York, N. Y., June 27 — The following statement, of international significance to the publishing industry, today was issued jointly by W. Bradford Wiley and Maurits Dekker, presidents of John Wiley & Sons, Inc. and Interscience Publishers, Inc., respectively:

At recent meetings the Boards of Directors of John Wiley & Sons and Interscience Publishers have decided, subject to approval of their stockholders, to merge the two publishing houses under the name of John Wiley & Sons, Inc. Both firms are leaders in the fields of physical, natural, and social sciences and in the field of engineering.

Maurits Dekker and Eric S. Proskauer of Interscience Publishers will join the Board of Directors of John Wiley & Sons, Inc. The expansion of the editorial programs of both houses will be maintained without disturbance, and the Interscience imprint will be continued.

The combined enterprise will offer an integrated line of scientific publications, including textbooks, encyclopedias, research monographs, scientific journals, and paperbacks. Authors will enjoy individualized treatment and international marketing facilities for every conceivable form of literary expression in science and technology.

Both firms operate London subsidiaries, and in the combined operation will offer complete world-wide marketing facilities without parallel.

John Wiley & Sons, Inc.
Interscience Publishers, Inc.
440 Park Avenue South
New York 16, N. Y.

Editor's Note—John Wiley & Sons, Inc., are publishers of Dana's famous mineralogies.

COLLECTING FLUORESCENT MINERALS

Conducted by ROBERT W. JONES, JR.

210 S. Rose Circle Dr., Scottsdale, Arizona

Abbreviations:

xl—crystal

xled—crystallized

ph—phosphorescence

fl—fluorescence

SW—short wave

LW—long wave

Several of you readers have written in saying that you have tried the new Broad Spectrum lamp of the Raytech Equipment Co. and are very well pleased, except for one thing. How is it possible to tell whether a mineral will fl. under LW or SW since the lamp gives off both wave lengths. This bothered me until I checked with the manufacturer and find they have a method of masking the lamp so the two waves can be differentiated. This is a distinct advantage over the old style lamps. I recommend that other manufacturers give this new idea some thought. It's a nice lamp. Harry Wain, of Raytech, did tell me this summer that Black Light Eastern probably has a model of his company's Broad Spectrum lamp under study now. I suppose that means they will shortly have a very similar model of their own as they did with the larger LW and SW cabinet type lamps.

Linda Stalling, Wellington, Mo. wrote to me during the summer asking for material on fl. minerals. She indicated that she was working on a project for a science fair. Perhaps some of you readers have something she can use. Instructions on displays, labeling, etc. would all be helpful. I covered some of this for her but many of you have excellent ideas you should share in a case like this. Drop her a card. She will be glad to hear from you.

Also, in the July-Aug. issue I requested further information on a fl. chabazite I had gotten from Wasson's Bluff, Parrsboro, Nova Scotia. Mr. Peter von Bitter, of the Nova Scotia Dep't of Mines, was kind enough to get in touch with me and give me a rather complete

history of the mineral. The fl. chabazite was collected by Dr. J. Kennedy in the year 1885. Mr. von Bitter then went on to trace the minerals for me through the Kennedy family to Acadia University to Scott Williams from whom I got them. Thanks again Mr. von Bitter for your interest and help.

The response to the last booklet I wrote "The Fluorescent Minerals of Franklin, N. J." has been very gratifying. A number of people have been very kind in their appraisal of it. Of course, several people have offered constructive advice which is appreciated, too. Constructive criticism can only lead to better results. While on the subject of Franklin may I say that I saw a number of Franklin collections this past summer. For fl. minerals, one of the best was Ewald Gerstmann's. Ewald lives in Franklin and is always on the look-out for the spec. that will improve his collection. He is always happy to show off this fine assemblage so when planning to go to Franklin get in touch with him. The address is Rte. 23, Franklin, N. J.

Looking back at this past summer I must say I had a thoroughly enjoyable time. With Richard Hauck acting as a guide in Franklin I really saw some great things there. Later, my son Bill and I packed our gear and left my wife, Alicia, and daughter, Sue, in Conn. and we headed for the west. Our first planned stop was at Clay Center, Ohio. This old locality is famous for the beautiful honey colored fluorite xls which fl. a strong yellow under LW and SW. They have occurred there in quantity and large size. I have seen fluorite cubes from there nearly 2 inches on an edge, magnificent.

Of course, I didn't hope to find anything like that but we were game to look. Unfortunately, there is very little actual mining taking place at the quarry. The large crusher is there and operating but is crushing mostly material from Gibbonsburg, Ohio. However, undaunted, we drove into the quarry, with written permission, and started searching. I found only one fluorite spec. all morning. It is a group of clear xls on limestone. They measure $\frac{1}{4}$ inch on an edge. The fl. is strong yellow LW and SW. We were far more fortunate in finding calcite xls. They occur in fine quantity mostly as scalenohedrons, some showing double terminations, some with inclusions, some with phantoms. The fl. is not strong-blue white LW and SW, best SW. Most of the calcite xls were on a brown coating (fluorite) on the limestone. This coating fl. a good yellow to cream LW and SW. Much of the limestone shows the same fl. There is also a good blue green phos. under SW. I was not able to stay long enough to collect at night. I had the time but the quarry owners have dogs—BIG dogs which are present at night.

Directions to Clay Center, Ohio. Southeast of Toledo, Ohio at the junction of routes 51 and 795, travel east on 795 a distance of 1.7 miles. Turn north (left) on county route 59, Bolander Rd., and travel .7 mile to the quarry entrance on the right. You can't miss the crusher and surrounding buildings.

Anyone interested in collecting at Clay Center can do so by writing the company for permission, Tiger Brands Division of Basics, Inc., Clay Center, Ohio. They are very generous and helpful giving collectors the run of the quarry when it is not operating. It doesn't operate very often now. The last blast, as of this writing, was Oct., 1960. It is really worth a visit. You have to find something, xls, coatings, and for the fossil addict there are casts of all sorts of creatures to be had for the picking, fl., too. A word of thanks here to Walter Martin, Birmingham, Mich. who put me in touch with the company. Incidentally,

the above mentioned coating (fl. yellow) turned out to be micro xls of fluorite so the micro mounter can find an interest there, too.

After leaving Clay Center, Ohio, Bill and I headed for the mountains of Colorado. There is the place for the mineral collector. My specific objective was the Sweet Home Mine, Alma, Colo. It is located about 4 miles up Buckskin Joe Gulch which runs out of the center of town. I wanted to check on fl. sphalerite which I heard of as having been found by Russ Jones, of West Haven, Conn. Incidentally, Russ has a really great mineral collection. Bill and I arrived at the mine with no trouble but possibly because of the altitude, we were at treeline, Bill got sick. I managed to grab a few spec. of blue fl. fluorite (LW) but wasn't able to check the sphalerite. So there it sits waiting for someone with a strong stomach and an ultra violet light to come collecting.

On the way south toward New Mexico Bill and I stopped at the Great Sand Dunes National Monument, near Salida, Colo. I recommend this spot if you're passing through. It was the most peaceful camp site we stopped at all across the country.

Our objective in New Mexico was the Harding Mine, near Dixon, New Mex. The pegmatite had been suggested to me by Scott Williams as a possible source of eucryptite, a rare lithium aluminum silicate which I have referred to before. Up until now the only U. S. occurrences were the old Branchville, Conn. pegmatite—hardly a source now. Also, Stafford Springs, N. H. still yields some small pieces of the strong red fl. mineral. The only outside source is So. Rhodesia. But in the U. S. there really hasn't been a good source of eucryptite for some time. All that is past. There is one good source of eucryptite now, the Harding Mine.

I had the opportunity to enter one of the tunnels of the mine with an ultra violet lamp and search for the mineral. This is the first time I have ever been able to examine the mineral in place, rather than on a dump. Along seams in the walls and ceiling I found a few fl.

areas, up to 2 inches across of eucryptite. This was the only place in the mine I saw it. Possibly what has been taking place is that weathering, or altering, can take place faster along these seams or cracks. Eucryptite, an alteration product of spodumene, will usually be found assoc. with that mineral in some altered state. It also is intimately assoc. with albite. I spent most of one afternoon in that tunnel, peering, cracking, collecting and I came away with a couple of small canvas bags full of chunks of pegmatite material. Scattered in those rocks was the precious eucryptite.

The collecting possibilities are as good at the Harding Mine as anywhere else. The operators are very nice although they are reluctant to allow collecting in the mine tunnels they have no objection about the dumps. I was allowed to collect the tunnels, and there found the eucryptite, but this article was a help in getting me in the tunnel. The mine is rather remote, being located about 8 miles from Dixon. I might also add, that unless you can collect at night, with a light, there is little possibility of getting any eucryptite. It is too difficult for most collectors to tell it from spodumene, with which it occurs.

I might point out one more very interesting fact about this eucryptite. The assoc. spodumene may fl. peach and I have noticed in a few spec. the peach fl. gradually moving into a red fl. color—eucryptite. This is a type of zoning, a result of alteration rather than lattice structure. I also saw one or two spodumene xls which apparently had completely altered and fl. red indicating eucryptite.

After a very enjoyable trip across the country, which climaxed another great summer in the east, Bill and I headed for the heat of the desert and a winter of reminiscing and spec. labeling.

Last summer one of the most commonly seen fl. minerals that is now being collected, and one which I very often receive from readers is the Newcomb, N.Y. limestone containing several fl. minerals. I have never been to the locality but

understand it is a road cut along Rte. 28 in the heart of the Adirondack Forest Preserve. There are several fl. minerals, as I said. One of these is a strong yellow fl. under SW lamp. This is chondrodite or a related member of the humite group, as norbergite. If the mineral occurs here as it does at Franklin, N. J. then the mineral is norbergite. Chondrodite, at Franklin, occurs only as xls. The grains in limestone are norbergite. The material from Newcomb has not been x-rayed but you can not be far wrong if you call it chondrodite. Assoc. with this strong yellow fl. chondrodite is a strong blue fl. material, SW only. This is most likely diopside. The assoc. is a common one since these and other minerals noted in this material are metamorphic and frequently assoc. together. This blue fl. material has been tentatively identified as anorthoclase, anorthite, fluorite, etc. but I am pretty positive it is diopside. Again, x-ray or other definitive analysis should be employed for a final identification but in this case it seems hardly necessary. Another fl. material noted from Newcomb is a pale yellow micaceous material. This is phlogopite, no question about it. The yellow fl. and the physical properties are very reliable. A fourth fl. material is a pale orange-pink fl. material (SW). This is calcite.

All in all, the Newcomb material is quite interesting since it does present 2, 3, or 4 fl. minerals in one spec. Unfortunately, much of the material I have seen has the fl. minerals so scattered that it is not as attractive as it might be. The last batch I received in the mail was about as good as I have seen. It came from Ronald Waddell, 148 Richardson St., Syracuse, N. Y.

Mrs. W. M. Elder, 1139 Davis Ave., Des Moines, Iowa sent me a couple of very nicely fl. geodes. They fl. very strongly, one white and the other yellow under both LW & SW. The fl. material was calcite, rhombic form. They seemed to show more etching on the surface than most I have seen.

Fred T. A. Balz, Box 85, Mayville, Wisc. sent some brightly fl. calcite (red-

SW) assoc. with hematite stained calcite, non-fl. This material came from an old copper deposit up in Canada. I was particularly impressed with the similarity of this red fl. and the red fl. calcite from the Bisbee copper deposit here in Arizona. The strength of the fl. is almost identical. Copper is supposed to be a quencher of fl. so this material must be of later origin.

The last couple of issues I have devoted some space to odd fl. minerals. Certainly the zoned spodumene-eucryptite qualifies as odd. Richard Hauck, of Bloomfield, N. J., came up with a good one this past summer. He gave me a double terminated quartz xl from Herkimer, N.Y. These quartz xls are well known as the "Herkimer Diamonds". In this quartz xl was a green fl. inclusion. I don't know what it is because it is so small and impossible to get at. It is definitely fl., however, and I think should rate as an oddity. Certainly, this is not common in the "Herkimer Diamonds."

The other day I dropped in to see Scott Williams. I was in need of a magnifier. Mine seems to have been lost. He showed me something new from Bausch

and Lomb which I bought. It is an illuminated magnifier. If you have ever been out on the dumps at night collecting with ultra violet lamps, or been in someone's cellar trying to see small xls in bad light then this is a suggested item which is really good. The magnifier has a handle not unlike a pencil type flashlight. Mounted at the end is a 10x lens with a halo reflector. Light the small flashlight type bulb and the halo around the lens reflects the light down onto the spec. where you want to view. I like it very much—cost \$7.50. While I was at Scott Williams Mineral Co. (440 N. Scottsdale Road, Scottsdale, Ariz.), I also bought a copy of his new mineral catalogue. It lists over 500 varieties of minerals and over 1,000 specific localities. What made it of value to me was the fact that each mineral which fl. was so designated by a separate column. I've already gotten a new occurrence of brightly fl. wollastonite (fl. strong yellow SW. good yellow LW) from the Mina Santa Fe., Chiapas, Mexico, by using the new catalogue. I would like to see all dealers catalogues make note of the fl. minerals they stock. It would certainly help sell minerals.

AN ANSWER TO A PRAYER!

Editor R&M:

We have had only one year of R&M and now wished it were a monthly. In the July-Aug 1961 issue on p. 338 it was suggested that we send \$3.00 additional and receive back numbers on alternate months.

"An answer to a prayer — that R&M be monthly."

Thank you. The \$3.00 additional enclosed.

C. A. Thompson
412 Evergreen Ave.
Brielle, N. J.

WANTS TO TRADE!

Editor R&M:

I am 14 years old and want to swap. I'll trade with anyone who wants to.

I've got agate, satin spar, petrified wood, red obsidian and some faceting quality quartz from which one might be able to cut some stars out of.

I would also like to hear about any collecting localities within a 150 mile radius of Modesto, Calif.

Jin Sell
1237 Nelson Ave.
Modesto, Calif.



Rocks and Minerals Association

(INTERNATIONAL)

DON PRESHER, PRES.

R. D. 3, MALONEY HTS., WAPPINGER FALLS, N. Y.



CURRENT EVENTS

of the

EASTERN FEDERATION OF MINERALOGICAL AND LAPIDARY SOCIETIES

PRESIDENT

Dr. George F. Size
Box 236
Murphy, N. C.

EXECUTIVE VICE-PRESIDENT

Lloyd A. Allison
1811 Cheek Road
Durham, N.C.



EDITOR

Mrs. Margaret Israel ↑
136 Hampton Roads Ave.
Hampton, Virginia

VICE-PRESIDENT

Richard Burnham
524 Highland Avenue
Upper Montclair, N.J.

TREASURER

Carl Krotki
250 W. 57th Street
New York 19, N.Y.

SECRETARY

Mrs. Marguerite Collyer
49 Green Road
West Nyack, New York

NEW OFFICERS ELECTED

At the business session of the 11th convention of the Eastern Federation of Mineralogical and Lapidary Societies, held in Miami, Florida, on August 11, 1961, Dr. George F. Size of Murphy, N. C., was elected President. Richard Burnham of Upper Montclair, N. J., became the new Vice-President, and Carl Krotki of New York City, the new Treasurer. Mrs. Marguerite R. Collyer is serving her second year as Secretary.

Because a change in circumstances made it impossible for the *Gem City Rock and Mineral Club*, Erie, Pa., to serve as host to the 1962 convention, the delegates accepted with pleasure the invitation of the *Central North Carolina Mineral Club, Inc.*, Durham, N. C., to meet in Durham, N. C., next year, and Mr. Lloyd A. Allison was appointed Executive Vice-President.

PRESIDENT'S LETTER

To All Member Clubs of the
Eastern Federation:

I want to state that I feel greatly the honor conferred upon me. During my other terms of office in the Eastern Federation I have tried to do all that I could to assist in the advancement of the Federation, and I will continue to do so to the best of my ability. I want the Federation to continue as a great organization in the development of our Earth Science hobby. I am proud indeed to be

President of a group of 82 clubs with over 5,000 members. I hope that all of you will feel free to offer your help, for I intend to call upon all of you in time of need. I know I will have a real challenge in attempting to live up to the record set by our past President, Roy Clark, but with everyone working toward the same goals we will succeed. We have many able members to fill the offices and committees necessary for the proper functioning of the Federation. From among them I have chosen the following, some of whom are reappointments, for I feel that most people work better after a year's experience:

BUDGET COMMITTEE:

Carl Krotki, Treasurer, who will name two assistants.

CONSTITUTION AND BY-LAWS:

Vernon Wertz, 9707 Sutherland Road, Silver Springs, Md.

CONVENTION RULES:

Paul Seel, Chairman, 3 Cynwyd Rd., Bala Cynwyd, Pa., and William Whitehouse, Asheville, N. C.

COMMEMORATIVE STAMP:

Sam Brown, 530 Ehringhaus St., Hendersonville, N. C.

CONVENTION ADVISORY BOARD:

Sam Brown, Chairman, R. R. Williams, Asheville, N. C., and Gene Vitalli, North Haledon, N. J.

EDUCATION AND PROGRAM AIDS:

Miss Cynthia Czapek, Chairman, 5305 Iroquois Rd., Washington, D. C., Dr.

Lee Bradford and Mrs. Nora Lavins. These are all reappointed, as their work is well under way and they can serve better by continuing.

FEDERATION DISPLAY, STORAGE AND TRANSPORTATION:

Albert B. Wilson, Miami, Florida

HISTORIAN:

Miss Florence M. Hight, 72 Atlantic Ave., Long Branch, N. J.

AUTOMOBILE & LAPEL EMBLEMS:

Mrs. Mirla E. Hunt, 138 Common St., Watertown 72, Mass.

JUNIOR ACTIVITIES:

John Weitmann Chairman, who will choose two assistants.

SAFETY COMMITTEE:

Miss Sylvia Wadhams, Chairman, 750 Migeon Ave., Torrington, Conn. (This committee produced such a fine brochure last year that there may be no work for them this year, but if there is, it will be in capable hands.)

MEMBERSHIP COMMITTEE AND

MEMBERSHIP CERTIFICATES is combined, with Dick Burnham, 524 Highland Ave., Upper Montclair, N.J. as chairman. He will select two assistants.

EDITOR OF CURRENT EVENTS:

Mrs. Margaret N. Israel, 136 Hampton Roads Ave., Hampton, Va.

NOMINATIONS:

Aaron Spector, Chairman, Miami, Fla.; Leonard Gerhart, Pennsylvania; Oscar Krauthaim, New Jersey; Haywood Brooks, Virginia; and O. G. Maganos, Mississippi.

NOMENCLATURE:

Neal Yedlin, 129 Englewood Dr., New Haven, Conn.

This listing shows the wide scope of activities of the Federation. It will take the cooperation of everyone to make this a successful year.

I look forward to seeing everyone at the next convention which will be held at the Jack Tar Hotel in Durham, N.C. The show will be held at the Durham Civic Center, just a block away. Lloyd A. Allison, 1811 Cheek Rd., Durham, N. C. is General Chairman of the Convention, and has already made great strides toward another very successful show

for the Eastern Federation. I am sure you will all enjoy coming to North Carolina next year, so please make your plans now.

Sincerely yours,

GEORGE F. SIZE, M.D.

NO SPLIT FOR FEDERATION

A plan for splitting the Eastern Federation of Mineralogical and Lapidary Societies into two Federations was withdrawn by the sponsor before the business session of the convention. It was felt that further time and thought must be given to the matter. The Boundary Committee will continue to explore the various avenues opened by the proposal.

AMERICAN FEDERATION OFFICERS

1961-62 OFFICERS OF THE AMERICAN FEDERATION, elected at the annual business meeting at Miami, Florida, 9 August, 1961:

President: Russell H. Trapnell, P. O. Box 10363, Phoenix 16, Arizona; Vice President: H. R. Hughes, P. O. Box 1163, McAllen, Texas; Secretary: Albert J. Keen, 2715 N. E. 41st St., Portland 13, Oregon; Treasurer: Wm. H. deNeui, 6600 Cornelia Drive, Minneapolis 24, Minnesota; Regional Vice President: Elsie Kane White, 3418 Flannery Lane, Baltimore 7, Md.; Regional Vice President: Johnnie Short, 1978 Mesa St., San Bernardino, Calif.

**AWARDS IN COMBINED
AMERICAN-EASTERN SHOW**

For the first time in the Eastern Federation awards were made under the Uniform Rules for judging entries. Awards were made on a point basis (90 for first place, 75 for second and 65 for third, in some divisions) and in three groups, Master, Amateur and Novice in adult entries, plus Junior awards. This resulted, in some cases, in more than one winner in one event, or perhaps no first place winners and several seconds in the same event. The confusion is dispersed after a little careful thought.

Following are the results of both American and Eastern competition:

AMERICAN FEDERATION NATIONAL AWARDS

MIAMI, FLORIDA, AUGUST, 1961

Woodruff Trophy Run-off

Mr. and Mrs. Richard L. Rice
Oregon Agate & Mineral Society
Hillsboro, Oregon

MINERALS, Thumbnail

Miss Dorothy Bauer
Lapidary Arts Guild of Austin
Austin, Texas

MINERALS, General

Paul Seel
Mineral Society of Pennsylvania
Bala Cynwyd, Pennsylvania

FACETING, Senior

Robert E. Hatch
Gemcrafters of Miami
Miami, Florida

Lapidary Achievement

Mr. & Mrs. M. G. Maline
Long Beach Gem & Mineral Society
Los Angeles, California

FACETING, Junior

Kathryn Boehme
Whittier Gem & Mineral Society
La Puente, California

FOSSILS, Junior

James E. Tuttle
Gem and Mineral Society of
Virginia Peninsula
Hampton, Virginia



Richard L. Rice and Helen M. Rice of Hillsboro, Oregon, receiving the famous Woodruff Trophy from its original donor to the American Federation, Harry L. Woodruff of Washington, D.C. (center of photo). It becomes their permanent possession—First Place winners at Miami, Fla., Show, in competition limited to previous winners.

EASTERN FEDERATION BEST IN SHOW AWARDS

MIAMI, FLORIDA, AUGUST, 1961

LAPIDARY, Master
Victor Pribil
New York Mineral Club, Inc.
Long Island City, N. Y.

LAPIDARY, Novice
George C. Bethel
Miami Mineralogical and
Lapidary Guild
Miami, Florida

MINERALS, Master
Paul Seel
Mineralogical Society of
Pennsylvania
Bala Cynwyd, Pennsylvania

MINERALS, Amateur
Paul Seel
Mineralogical Society of

Pennsylvania
Bala Cynwyd, Pennsylvania

LAPIDARY, Amateur
Nicholas M. Sourant
Central Florida Gem &
Mineral Society
Orlando, Florida

LAPIDARY, Junior
Stephen R. Jenkins
Gemcrafters of Miami
Miami, Florida

MINERALS, Junior
Peniel Romanelli
Miami Mineralogical &
Lapidary Guild
Miami, Florida



Adolph and Vivienne Dosse of Fontana, Calif., who scored Second Place at the Miami, Fla., Show in the Woodruff Trophy run-off.

EASTERN FEDERATION RIBBON AWARDS

MIAMI, FLORIDA, AUGUST, 1961

Class "A" - Society Exhibits

A-2 GENERAL LAPIDARY

- Miami Mineralogical & Lapidary Guild
Miami, Florida 2nd
- Canal Zone Gem & Mineral Society
Balboa, Canal Zone 3rd

A-6 JEWELRY w/natl stones

- Louisville Craftsmans Guild
Sulphur, Kentucky 1st
- Gem Cutters Guild of Baltimore
Baltimore, Maryland 2nd
- Gem and Lapidary Society of
Washington, D. C. 3rd

Class "B" - Minerals

B-1 MINERALS any size or type

- Floyd & Helen Mortenson
Pontiac, Michigan Amateur 1st
- Walter Blackwell
Miami, Florida Amateur 2nd

B-3 MINERALS, Miniatures

- Paul Seel
Bala Cynwyd, Pennsylvania Amateur 1st
- Russell Calhoun
Jackson, Mississippi Amateur 3rd

B-4 MINERALS, Thumbnails

- Martha Spector
Miami, Florida Novice 3rd

B-7 MINERALS, Element Group

- Mrs. Virginia A. Size
Murphy, North Carolina Amateur 3rd

Class "C" - General Lapidary

C-1 Three types of work

- Robert Tay Lowe
Miami, Florida Novice 1st

C-4 Cabochons, variety

- Harry S. Reese
Baltimore, Maryland Amateur 1st
- Catherine Muffoletto
Baltimore, Maryland Amateur 2nd

C-8 Polished Geodes

- Aaron Spector
Miami, Florida Amateur 1st

C-10 Open Lapidary

- Mr. & Mrs. Wm. M. Crosby
Baltimore, Maryland Novice 2nd

C-14 Novelties

- Frank G. Luther
Miami, Florida Novice 1st

C-16 Faceted, Natural stones

- Victor Pribil
Long Island City, New York Master 2nd

Nicholas M. Sourant

- Orlando, Florida Amateur 2nd

Mr. & Mrs. Wm. M. Crosby

- Baltimore, Maryland Novice 3rd

C-17 Faceted, Natural & Synthetic

- Lynn H. Collar
Miami, Florida Master 1st
- George C. Bethel
Miami, Florida Novice 1st

Class "D" - Jewelry

D-2 Jewelry & Metalcraft, with or without stones

- Joe D. Hanna, Jr.
Grand Rapids, Michigan Master 2nd

Lloyd Lowe

- Miami, Florida Amateur 1st

Paul R. Longnecker

- Havertown, Pennsylvania Amateur 2nd

A. Laurie Markuson

- Havertown, Pennsylvania Novice 1st

Edna M. Stern

- Miami, Florida Novice 3rd

Class "K" - Guest Exhibits

EF-K-3 Faceted Stones

- James E. Rishell
Miami, Florida Novice 1st

EF-K-5 Jewelry & Metalcraft
 Mary Mickler
 Pompano Beach, Florida
 Amateur

EF-K-6 Mixed Display
 Mr. & Mrs. H. A. Klundt, Jr.
 Opa Locka, Florida
 Novice

Class "F" - Open Division

F-3 Mixed Display
 Helen F. Biglin
 Miami, Florida
 Amateur

F-4 Transparencies
 George F. Size
 Murphy, North Carolina
 Novice

Class "G" - Junior Division

G-1 Minerals, any size or type
 Peniel Romanelli
 Miami, Florida
 1st

G-2 Lapidary, General
 Arthur Losenbeck
 Opa Locka, Florida

Denny Cormier
 Coral Gables, Florida

Jim Groves
 Miami, Florida

G-3 Lapidary with rough
 Gene Pedersen
 Miami, Florida
 Sammy Brill
 Miami Beach, Florida

G-4 Minerals, Miniature
 Gene Pedersen
 Miami, Florida

G-7 Faceted, natural or synthetic
 Mounted or unmounted
 Stephen R. Jenkins
 Miami, Florida

Class "H" - Educational

H-1 Rocks and Minerals,
 Occurrence
 Paul Seel
 Bala Cynwyd, Pennsylvania

EASTERN FEDERATION HISTORY

By Florence C. Hight, Historian

3rd (Fifth Convention - Continued from
 September - October issue)

1st A divergence from the regular exhibit was introduced this year (1955) by Mr. Phillip R. Cosminsky. Besides his 5-drawer case of micromounts, which was accompanied by a description of the proper method of mounting and displaying a micromount, he had a case in which the principal item was a treasured book. It was "De Re Metallica by Georgius Agricola", translated from the Latin edition of 1556 by Herbert Clark Hoover and Lou Henry Hoover. The translation was printed in London in 1912. The book is a story of mining methods and metallurgy as practiced in the known world of the 1500's. It contains the first real attempt at a systematized classification of minerals. It was opened to page 213 and showed four approved ways to descend into the mines; by a crude ladder, by sitting on a stick tied on a rope and lowered by a windlass, by sitting in the dirt and sliding down while holding on to a rope, or by climbing down rough steps cut into the rock. It is a book any mineral-minded person would be proud to own.

2nd

3rd While I was admiring the specimens in Mr. Cedric Gleason's display he told me something about reading the history of Faberge. It was the first time I had ever heard of the fabulous Carl Faberge. Mr. Gleason's enthusiastic account made me decide to stop off in Richmond, Va., to see the collection of Faberge Easter eggs at Museum of Fine Arts. We had to pass the museum on our way to the two-day field trip to Amelia Court House which Mr. Holiday had planned for us.

1st Carl Faberge was jeweler to the Imperial Russian court from 1870 until tragedy struck it in 1917. It is believed that the annual presentation of jeweled eggs began in 1884 when Alexander III was Tsar and Marie Feodorovna was Empress. Every year until his death Alexander gave a surprise egg for Easter.

When Nicolas II came to the throne in 1894 he expanded the custom, giving an egg both to his wife and to the Dowager Empress. These masterpieces of the jeweler's art and craftsmanship are set up urn fashion or in gold-banded cage-like holders, crusted with precious gems and enameled on gold. Some of the 5-inch eggs are hollowed-out blocks of jade or alabaster. Others are covered with translucent enamel. All have lids or doors cut in the sides. One lid has a huge emerald for a knob. Inside one is a 2-inch portrait in color of one of the Tsarina's children. The little frame is composed of 2,000 diamonds. Mrs. Pratt, who collected the masterpieces and presented them to the Museum, was able to obtain enough of them to give the viewer a glimpse of the Imperial family's life. Apparently the Tsar wished to commemorate certain events as shown in the enclosures in the eggs. The one for 1916, probably the last of the fifty-seven, was of white translucent enamel and bore the Red Cross to honor the Empress's work in the hospital. Compared to the others it is severely simple, but all the more impressive.

In the opinion of those who attended, this Fifth Convention, hosted by the mineral and lapidary societies of the District of Columbia and the Guild of Baltimore, may be equalled but probably never surpassed.

WHAT GOES WITH OUR CLUBS

The Southern Appalachian Mineral Society, Asheville, N. C., led by Jack Hanahan, visited the spodumene mine at Kings Mountain, N. C. early in September, and later in the month, hunted quartz crystals under the guidance of Tom Price.

The Fulton County Mineral Club, Gloversville, N. Y., has had a busy summer, making many field trips. The loot was re-distributed by means of an old-fashioned swapping bee held in Thatcher Park, Albany, N. Y., when over 200 rockhounds gathered for an enjoyable and profitable day of swapping. The club hopes to make this an annual event.

The Syracuse Gem and Mineral Club, Syracuse, N. Y., exhibited at the New York State Fair held in Syracuse in September. Their booth attracted large crowds with the theme of "Mineral Collecting - A Family Hobby".

The Georgia Mineral Society, Atlanta, Ga., showed off the results of summer field trips when the Gem Club had a "Brag and Swap" night in September. The Mineral Society had a similar program also, with prizes given for the best specimen and the best story. Field trips to Ball Ground, Ga. and to Franklin and Cowee Valley, N. C. started the fall season.

The North Jersey Mineralogical Society, Paterson, N. J., held its usual symposium on summer collecting at the September meeting. Joining the Newark Mineralogical Society for a field trip to Moodus Connecticut, the members hunted beryl, tourmaline, vesuvianite and other minerals at the Mt. Tom Beryl location.

The Newark Mineralogical Society, Inc., Newark, N. J., at the October meeting nominated officers for 1962, and talked of summer hunting. The club participated in the Franklin, N. J., show in October.

The Central North Carolina Mineral Club, Durham, N. C., will be host to the 1962 Eastern Federation Convention and Show, and members are already hard at work, but took time off in September to hold their annual picnic and swap-fest.

The Miami Mineralogical and Lapidary Guild, Miami, Fla., is relaxing after helping out with the big show in August — but in their case, relaxing means making plans for next year. They did take time to view a film on "America's Buried Treasure: Marble". Over 50 members joined the official hosts, Gemcrafters of Miami, in putting on the fine show.

The Charlotte Rock and Mineral Club, Charlotte, N. C., had the good luck to go on a field trip to the dump of a working mine near Lexington, N. C.,

where the pickin' was really good. A night field trip to Cabarrus County gave an opportunity to use black lights to hunt for fluorescent Scheelite.

The Geological Section, Buffalo Society of Natural Sciences, Inc., Buffalo, N. Y., under the guidance of Anthony Sojka, took a two day field trip to the Bancroft, Ontario, area. The McDonald and Silver Grater Mines were visited by the group, but there are 22 others in the area and a few individuals visited some of these.

The Mid-South Earth Science Club, Memphis, Tenn., heard talks by Tommy Hall on "Fluorescent Minerals" and by Ward Hutchins on "Meteors and Tekites". President Bill Riddle recently presented a collection of Coon Creek fossils to the Smithsonian Institution, a collection which included some new varieties.

The Alabama Mineral and Lapidary Society, Birmingham, Ala., has something better than a gold mine to hunt in — it's a coal mine where plant fossils may be found in the coal, as well as several minerals. This is in Jefferson County. Another favorite hunting spot is in Madison County where barite is plentiful.

The Mohawk Valley Geological Society, Clinton, N. Y., joined with another club, the Tramp and Trail Club, for a trip to the Middleville and Mannheim, N. Y., area, to examine geological deposits, structure, age correlation, unconformities and faults. William Pritchard was in charge.

The Miami Mineral and Gem Society, Miami, Fla., joined with the Gemcrafters of Miami to help with the big show, and prepared one of the most interesting exhibits. This was a display of Florida fossils and included a three-foot coral "reef". Also displayed was the Wise Trophy, permanent possession of which was won by this club in 1959. It was awarded for club participation in convention exhibits.

The Mineralogical Society of Pennsylvania, Doylestown, Pa., led by Kenneth

Fisher, made a field trip to Bethlehem's Grace Mine near Morgantown, Pa., with 156 members attending. (Question from Field Trip Chairmen all over the country: How does Fisher keep 156 people from (a) tramping all the good stuff into the ground and (b) pushing each other off a cliff?)

The Western South Carolina Gem and Mineral Society, Greenville, S. C., has just began publication of a most attractive bulletin, "The Wescagem", one that the club may be proud of, indeed. The August meeting heard a talk by J. W. Hicks, Jr., on "Fiber Optics", particularly on *alexite*, a mineral with the power of reflecting on its polished upper surface the image of any object upon which its lower surface rests.

The Central Virginia Mineral Society, Lynchburg, Va. heard talks by Mat Adams and Dave Leach about a month-long field trip through the West. R. J. and Mrs. Baldwin discussed their stay in North Carolina, where he took lessons in the lapidary art and she studied jewelry making. A swapping-bee re-distributed the summer loot.

The Gem and Mineral Society of the Virginia Peninsula, Hampton, Va. had a working demonstration on the making of Christmas gifts, making use of the skills developed during the year. Ken Poynter was in charge.

Gemcrafters of Miami, Miami, Fla., report that they have kicked off their shoes and are taking a good rest with the knowledge that the big job is over. They deserve the rest and congratulations on a job well done.

HELLO, AGAIN

After bidding you all "Good-bye" in the last issue, we find ourselves, to our great surprise, in the same old spot. Feels kinda good, though, and we look forward with pleasure to continuing the acquaintances begun last year. Keep your bulletins and news letters coming in. The deadline is the 20th of the "odd" months: November, January, March, May and July. Thanks again to all of you.

— Margaret Israel

Club and Society Notes

Attention Secretaries—Please submit neat copies. Give dates and places of meetings.

ROCKS OF CONNECTICUT KLUB (R.O.C.K.)

About 25 members from Andover, Bolton, Coventry, Vernon and Wapping, Conn. Pres: Holden Wright, Box 420, RR 2, Manchester P.O., South Rd., Bolton, Conn.; Vice Pres. Robt. Prinz, So. Coventry, Conn.; Secy. Mrs. Holden Wright, Box 420, RR 2, Etc.; Treas. W'm. Valentine, Route 6, Bolton, Conn.

Meet 1st Friday each month at Wright's home on South Road, Bolton, Conn.

DES PLAINES VALLEY GEOLOGICAL SOCIETY

The Society proudly announces that its "Crystal Cluster" was awarded 2nd place at Mid-West Federation Convention Editor's Breakfast at Saginaw, Mich., in July. Congratulations to Mrs. Olive Sherman, Editor.

The September meeting, held Sept. 21, 1961, at 8 p.m. at Rand Park Field House, Des Plaines, Ill., was a Vacation Find Brag Night with displays and brief accounts by members on summer trips and finds.

Mrs. Florence M. Swan
322 Harvey Ave.
Des Plaines, Ill.

ROCK RIVER VALLEY GEM & MINERAL CLUB

Because of the interest in gems and minerals, Rockford and Rock River area (both in Illinois) has its own club — the Rock River Valley Gem & Mineral Club which meets the last Saturday of each month at 7:30 p.m. in the Burpee Art Gallery, Rockford, Ill. Lloyd Voss is President, Ret Latta is Vice-President, and Chester Hall (603 Pershing Drive, Loves Park, Ill.), is Secretary-Treasurer.

CHICAGO ROCKS & MINERALS SOCIETY

Our September meeting, held Sept. 9th, 1961, at the Greenbriar Field House, 2650 Peterson Ave., Chicago, Ill., was a Brag Night for our group. Having had seven field trips this summer and all to lucrative picking sites, there was lots to brag about. Most of all we must brag about our very energetic

Field Trip Chairman, Mr. George Smith. He was responsible for all of the wonderful sites, most of which were new to our Society. Envious specimens were displayed, slides, and films were shown by many members.

Our micro-mounting group, paleontological group, and mineral and geological study groups have resumed for the season and have interesting programs arranged for all interested.

Mrs. May Meltzer, Pub. Chr.
5943 No. Maplewood Ave.
Chicago 45, Ill.

OKLAHOMA MINERAL & GEM SOCIETY

The annual picnic was substituted for the regular meeting of the Oklahoma Mineral & Gem Society on June 11th, 1961, due to the Rocky Mountain Federation and the Wichita Falls-Texas Federation Shows. The picnic was well attended and held at Will Rogers Park. The members consumed a large quantity of food, swam in the beautiful pool, and played bingo for two hours after dinner. The prizes were very nice with the grand prizes consisting of a large box of barite rose rocks and a large piece of Brazilian agate donated by Dr. and Mrs. Walter Fiegel of Carrollton, Texas, who were special guests of Mr. and Mrs. Hamilton Bewley. A good time was had by all who attended.

At the July meeting Mr. Norman Flaigg presented a quite lengthy but very interesting resume of the Rocky Mountain Federation Show which was held in Casper, Wyoming in June. His description of the beautiful displays and winners of the competitive exhibits was especially interesting. The members enjoyed listening to the many amusing incidents that happened during the three day conclave, and about the nice arrangements the Casper clubs had made for serving food to those attending the show. Mr. & Mrs. Flaigg were serving as delegates for the OMGS, the Enid Rockhound club, and the Ponca City Northern Okla. Mineral & Gem Society. Mr. Flaigg spoke about the many do's and don'ts a club should pay special attention to when planning its own show. Delightful refreshments were served after the meeting adjourned.

Maxine Stoner
Publicity chairman
2725 Warwick Drive
Oklahoma City 16, Okla.

Publications Recently Received

Lahee — Field Geology (6th Edition).

By Frederic H. Lahee, Consulting Geologist, 926 pp., 641 figs. Published by McGraw-Hill Book Company, Inc., 330 W. 42nd St., New York 36, N. Y. Price \$10.75

Field Geology has long been acclaimed for its broad coverage of subject matter, for its concise definitions, and for its consistent policy of explaining the similarities and differences between phenomena which in certain respects resemble one another but which may be of radically diverse origins.

The sixth edition retains the features which have made Field Geology a valuable, convenient text and reference for teachers, students, and practicing geologists. The text is divided into logical numbered sections, or articles. Throughout, there is a natural progression from the known to the unknown. The book first discusses simple phenomena observable in the field and then progresses to the conclusions that can be made from such observation. Every term used for the first time is clearly defined. All maps and figures have legible, easy-to-read letters and numbers.

Every branch of geology treated in the book has been brought up to date. There are concise definitions of many new terms: turbidity currents, stone tracks, patterned ground, soil profile, biologic facies, palynology, pluton, lopolith, phacolith, ring-dike, cone sheet, metamorphic facies, diapir fold, wrench fault, granitization, etc.

Holtedahl — Geology of Norway

Olaf Holtedahl, Editor, assisted by 21 contributors, 540 pp., 184 figs. 19 plates, 1 geological (bedrock) map of Norway, 1 glacial map of Norway. Published by Oslo University Press, Oslo Norway Price \$15.00

The aim of Geology of Norway is to give a concentrated and up-to-date survey of the geological structure and history of Norway. Each chapter of the comprehensive coverage is broken down into significant sub-classifications and dealt with in the manner most serviceable by an expert in his field.

For those of us who are interested in the rocks and minerals of Norway, here is the ideal book. It is all in English and its many illustrations and maps add to its value.

Schooner — Mineralogy of Connecticut

By Richard Schooner, 89 pp. Published by Fluorescent House, 12 Beach Place, Branford, Conn. Price \$3.50
Connecticut is famous for its minerals and

the author here attempts to bring the reader up-to-date on what has been found. In the introduction the author states:

"This book is essentially an annotated list of Connecticut minerals, numbering around two hundred and fifty different species. In recent years, the published literature on the subject has fallen far behind the discoveries which have been made. The author feels that an attempt should be made to correct this deficiency, especially since it coincides with a renewal of interest in mineral collecting and study. A considerable hobby has developed, of late, based on the minerals of the state. Unfortunately, available data is mostly obsolete. Our universities used to publish information, but their modern contributions are devoted almost entirely to geology, rather than mineralogy. The same is true of the State Survey, whose last really original bulletin on the topic, Schairer's "The Minerals of Connecticut", was printed in 1931. All of this is in marked contrast with the situation which prevailed in the Nineteenth Century, when innumerable articles, in books and magazines, were concerned with occurrences in Connecticut. Bruce, Silliman, Shepard, the Danas, and many other pioneers of the science, gathered much of their material at localities in this state. That was partially attributable to the ease of access, being close to both Boston and New York, and particularly to New Haven, which was a center of mineralogical research, but it also reflected the great abundance and diversification of the species which are found in Connecticut."

Jones — Fluorescent Minerals of Franklin, New Jersey.

By Robert W. Jones, Jr., 22 pp., 1 map. Published by Fluorescent House, 12 Beach Place, Branford, Conn. Price \$1.75.

The zinc mines at Franklin, N. J., are famous for their fluorescent minerals. In this paper it is the intention of the author to provide an up-to-date guide for the fluorescent mineral collector.

Mr. Jones is the Editor of "Collecting Fluorescent Minerals", a regular feature in R&M.

BLIGNAUT — The Gemstones of Southern Africa.

Compiled by Adi Blignaut, 28 pp. Published by the Geological Museum, Johannesburg, Transvaal, South Africa.

This interesting paper was prepared for a joint exhibition by the Geological Museum of Johannesburg and the Witwatersrand Gem

and Mineral Club. It lists alphabetically the gemstones, describes them and gives their localities.

Manganese deposits in Argentina

A geological economic report on the manganese deposits situated in the south of the Province of Santiago del Estero (Ambaragasta and Sumampa Hills) and north of the Province of Cordoba (Northern Hill) of the Argentine republic. 38 pp., 9 figs. All in Spanish.

Published by Ministerio De Hacienda, Economia e Industria, Direccion Provincial De Mineria (Autoridad Minera), Independencia 385, Santiago Del Estero, Argentina.

What is Geology?

Prepared by the Faculty of the Department of Geology, University of Arizona, Tucson, Ariz. — 36 pp.

Science Reports of Tohoku University

Three papers (all in English) cover mineralogy, petrology and economic geology. One interesting paper, "On idaite in Japan", by Tsunehiko Takeuchi and Matsuo Nambu, describes this new mineral at a number of localities in Japan. Idaite, named for the Ida mine in Southwestern Africa, is a copper mineral resembling an orange bornite.

Published by Department of Geology, Tohoku University, Sendai, Japan.

Murdoch & Webb — Supplement to Minerals of California.

The latest "Supplement to Minerals of California," now available, brings up to date one of the Division's most popular books. This useful pamphlet, as well as the bulletin, "Minerals of California", was compiled by Professors Joseph Murdoch of the University of California at Los Angeles and Robert W. Webb of the University of California at Santa Barbara. It constitutes additions to California mineral localities from January 1, 1955 through December 31, 1957.

Three new previously unknown minerals were found in California during the 3-year period, 1955-1957. The three are galeite, gerstleyite, and nekoite; in addition 23 mineral species were reported in California for the first time.

Uranium and rare-earth minerals have multiplied in their report frequency. Autunite was reported from five localities in three counties in Bulletin 173; it is now known from 25 localities in 10 counties. Carnotite was unreported in "Minerals of California"; it is now known from 14 localities in 9 counties. At least 15 of the minerals new to California are radioactive rare-earth minerals.

Mineral collectors, mineralogists — both amateur and professional — as well as "rock-hounds" of all ilk will need this basic source book in their personal libraries.

Paper-bound, in convenient six- by nine-inch size, the "Supplement" contains 46 pages; it is priced at \$1.00 plus tax. The pamphlet may be ordered from the California Division of Mines offices in the Ferry Building, San Francisco 11, Calif.

Dealers Catalogs

Scott Williams Mineral Company, Inc., 440 N. Scottsdale Road, Scottsdale, Ariz., have just released their newest catalog — a most interesting, illustrated edition covering 80 pages. The catalog features minerals, rocks, mineral determination supplies, chemicals, micromount supplies, field and collecting equipment, books, etc. A beautiful vanadinite specimen, in color, is on the front cover of this handsome 8½ x 11 inch catalog which sells for \$1.00, postpaid.

Minerals Unlimited, 1724 University Ave., Berkeley, Calif., have put out a 6 page "Fine Mineral" lists featuring minerals from famous world-wide localities. This price list is free. Send for your copy today, read it carefully then rush your order — mineral prices may be raised in the near future.

Albanese — Notes on the Minerals of Franklin and Sterling Hill, N. J.

By John S. Albanese, pp. 133-149, 2 figs. Published by the author, John S. Albanese, P.O. Box 221, Union, N. J. Price 50c

Another intensely interesting report on the world famous zinc mines at Franklin and Sterling Hill, N. J. If anyone is interested in Franklin minerals he should have this report.

CARE AND USE OF DIAMOND SAW BLADE

I am enclosing a little booklet (7 pp.) covering the care and use of diamond saw blades. Of course this booklet is largely slanted to our new Interlock blade but I have tried to cover the salient points that would be of interest to everyone who uses any kind of a diamond saw blade.

You will note in the discussion of "Speed of Operation of the Blade" that we recommend operating speeds up to 8,000 surface feet per minute. High speed operation of this sort is permissible with our new Interlock blades.

I would appreciate it if R&M would mention in your editorial that a copy of this pamphlet is free to any one who requests it.

C. CLAYTON HAMILTON
President
Lapidabrade, Inc.
2407 Darby Road,
Havertown, Pa.

WITH OUR ADVERTISERS

Conducted by James N. Bourne

c/o Rocks and Minerals, Box 29

Peekskill, N. Y.

Advertisers are cordially invited to submit News Items to this Department

We would like to bring to our reader's attention the following note from Richard D. Williams of Indiana Lapidary Supplies, 48 McArthur Court, Anderson, Indiana whose ad can be seen regularly in R&M.

"We are, in conjunction with our affiliates, the largest and fastest growing lapidary supplier in the state of Indiana. We are able to supply any item of equipment, supplies or cutting material. We are the largest supplier of cullet in the United States, having supplied the wholesale and retail trade since 1954.

"A printed list of items offered for sale is available at no charge and will be supplied upon request. However, many items now in stock and arriving every day do not appear in our current list, and anyone desiring an item which they do not find on this list is invited to inquire as to its availability. Indiana Lapidary Supplies is primarily a mail-order firm."

Sergio Del Fava of Astro Lapidary Co., 611 Broadway, New York 12, N.Y., also seen regularly through our advertising pages would be pleased if we passed on the information which is as follows:

"Would you please inform the readers that we have completed our catalogs entitled "Catalog for the Jewelry Craft" and also "Astro's Catalog for the Gem Cutter". In these we list a large assortment of cut stones, cultured pearls, tumbled stones, rough cutting materials, both cab and faceting, slabs, tools and lapidary supplies. These are being given out free of charge. Clubs or schools requiring a quantity should write to us giving us

the amount needed. Also inform them that we more than welcome visitors to browse at their leisure thru our racks of cutting rough, slabs and show cases of cut stones. They will find that Astro is designed for the jewelry craftsman, collector and rockhound. We are open 11:00 to 6:00 Monday thru Friday and 10:00 thru 6:00 on Saturday."

Note:—We are pleased to print the above for Mr. Del Fava as well as items of interest from all advertisers who send us such notes.

Here is a little note from another advertiser that arrived quite sometime ago and due to lack of space was not able to insert. We are pleased to do so now.

"Perhaps you would be pleased to know that the results of our ad in Jan-Feb issue of this year was most gratifying.

"We have received many letters from our customers telling us that our specimens were the finest they ever purchased and many have sent in repeat orders for their friends. A number of them even offered to pay postage because of the excellent value.

"We have received orders from all over the United States, Canada and as far as Helsinki, Finland. We shall endeavor to maintain the highest standards at all times."

Note: the above item as received from Thomas J. Chwan of Fluoroscents, P.O. Box 124, Garfield, N. J., who is currently running an ad in our classified section of R&M. Hope you keep on doing well, Mr. Chwan.

Another compliment as to pulling power of those placing ads with R&M is attested from the note received from

Walt Walker of San Juan Minerals, P.O. Box 33, Bayfield, Colo.

"I have had so much mail from my first classified ad I am almost afraid to advertise again. However I am really pleased, so will you repeat my ad in the following issue."

E. E. Smith of Geode Industries, 106 West Main, New London, Iowa, and occupant of our 3rd cover regularly is featuring the Tasco 30X Stereo Microscope, 30 power, through his ad this issue in R&M. It's a beauty and here are some of the features:

"Twin eyepieces, twin achromatic objective lenses, sturdy polished black frame, spring specimen clips, ground glass viewing stage, hardwood carrying case, origin and use chart, rock and pinion focusing knob, mineral samples (36 in all listing name and origin). This fine microscope complete with the 36 mineral specimens sells for \$24.95 postpaid.

"We also handle foreign cutting material for the gem cutter such as: Snowflake obsidian, bird of paradise agate, phantom amethyst, labradorite, nice green aventurine, moss agate, blue tiger eye, bloodstone, and golden tiger eye. All items unconditionally guaranteed to full satisfaction. Drop us a line while supply is plentiful."

An item from Mr. & Mrs. Robert R. Rozema of Rozema's rockpile reads as follows:

"On September 1st we will be in our new quarters at 776 Leonard N.E., Grand Rapids 5, Michigan. Our's is the oldest, complete rock shop in Grand Rapids. For three years it was a part-time operation, but with our new, larger facilities, we will be operating on a full time basis, hours from 9 to 9 daily.

"We handle everything for the rock-hobbyist - mineral specimens, cutting material, findings, silver, tools, equipment, grits, polishing compounds, books custom jewelry etc."

Note: R&M wishes the Rozema's much success upon their move into new quarters this past September and that rock-

hounds in the area will have the opportunity to visit their new shop and stock up as to their needs.

Lapidabrade, Inc., 2407 Darby Road, Havertown, Pa., is offering through their ad this issue large pieces of labradorite for book ends & spheres. The labradorite is of fine color and labradorecense. 100% usable. Wholesale only. Limited quantity - run of mine. Fed. Tax No. & check must accompany order.

From Raoul B. Ortel, Astral Hobby Shop, 9088 Baltimore Blvd., College Park, Md., you may purchase the following:

"100 thumbnail specimen boxes for \$1.50 postpaid. Postal card mineral specimens in color, 32 varieties, 6 for 30c.

"We also handle MK-Diamond saw blades, Estwing picks, hammers. We stock findings, books and lapidary supplies. Come in and visit us."

American Gems and Minerals, Inc., 9775 S. Dixie Hiway, Miami 56, Florida begins advertising in R&M this issue and forwards to us the following announcement.

"NOW OPEN FOR BUSINESS —
One of the largest and most complete lapidary, jewelry and rockhound supply sources in the country. Over 5000 sq. ft. of floor space devoted exclusively to gems, minerals, specimens, jewelry findings, tumbling, cabochon, faceting and polishing equipment and supplies. No catalog yet, but get on our mailing list for bulletins, etc.

"For some rough cutting material specials, we have: Mariposite - beautiful apple green mottled stone from California's Mother Lode area; Mexican red flame agate; golden sheen obsidian. Look up our ad this issue for other specials of your choice."

Some nice deep-banded rose rhodochrosite in rough pieces ideal for cabinet slabbing, or tumbling.

"This material comes from the Capilitas Mine at Catamarca, Argentina and

was personally selected by me on a recent trip. Available in pieces from 1 to 60 lbs. Look up our ad this issue in R&M."

The above item as received from F. E. Miller, 532 Woodland Ave., Mountain-side, N. J.

F. N. Philbrick, Pres., Eastern Art Craft Co., P. O. Box 732, Abington, Mass., is proud of their Roto-Vibro-Pol tumbler. The following data explains why:

"From rough stones to mirror finish in two days, 1500 rotary motions per minute, will handle up to 3 lbs. of stones with standard charge, no belts or pulleys and simple to operate. Machined and formed steel parts - ball bearings - Quieter than most tumblers, rubber cushioned.

"Model 1 - Roto-Vibro-Pol (complete) sells for \$39.45 and guaranteed for 1 year against faulty parts or poor work-

manship. Just the thing for those who do lots of tumbling. An ideal gift for Christmas too. Write for brochure for further details and note our ad in R&M this issue."

Here is a helpful gesture on the part of Phil Betancourt of the Philmar Co., Box 45, Florissant, Mo., to encourage beginners in rock collecting. We quote Phil as to the following:

"To become better known as a company we would like to give a free specimen of hemimorphite to any beginner who will send postage. There is no obligation. Specimens will be sent as long as they last. The better ones first."

Mr. Phil Betancourt is running a classified ad this issue in R&M.

Again is is our pleasure to extend to all — A most Joyous and Bountiful Holiday Season.

DR. BENJAMIN SCHWARTZ

(Obituary Notice)

It is my sad duty to report the death of Dr. Benjamin Schwartz on June 21st, 1961, one of my best friends and a subscriber to ROCKS AND MINERALS.

Dr. Schwartz had a heart attack in 1958 and after hospitalization and a long rest was able to return but with shorter work periods, to his profession of dentistry. On the night of June 20th he was seized with a 2nd attack and in the early hours of the 21st left on his last collecting trip. May the good Lord guide him to deposits of xls he loved so much in this life to study.

He was interested in all the natural sciences being a member of the American Assoc. for the Advancement of Science, the Mineralogical Society of America, the N. Y. Mineralogical Club and of course the Rocks and Minerals Assoc.

He was an ardent opera lover besides being interested in astronomy, mineralogy, paleontology, microscopy.

He had a very large collection of minerals, specializing in xls; fossils and rocks. Included in the fossils was a large collection of teeth which was very appropriate to his profession. The family retained a few of his choicest specimens as a remembrance and the remainder were purchased by Winston Gold of Globe Minerals who will soon put them up for sale.

Dr. Schwartz who was 66 years old is survived by his wife Rhea, a son Karl and a daughter Rhoda.

Although mineralogy was only his hobby he did much to publicize the beauties of the Mineral Kingdom by having his choicest specimens displayed in his patients' waiting room.

He was a very gentle dentist, which I know from personal experience, and very modest in his fees, being satisfied with a modest living for himself and his family and a little left over to buy some xls.

In closing I know no more appropriate phrase than that which the poet Halleck wrote for his friend Rodman Drake

"None knew thee but to love thee,
Nor named thee but to praise".

Harry Grahl.

MIRO BIANCHI (Obituary Notice)


The North Jersey Mineralogical Society wishes to report the death of Miro Bianchi of 215 Kearny Street, Paterson, N. J. on Wed. Aug. 9, 1961, at age 75.

Mr. Bianchi had been one of the pioneer mineralogists in this area and had been active in the North Jersey Mineralogical Society for many years. He was one of our charter members and this year was made an honorary member of the Society.

Mr. Bianchi had been employed as mineralogist at the Paterson Museum.

W. R. Welsh

No. 80-2
MEN'S RING MOUNTING
12 x 16 mm cushion
Gold Filled Trim Sterling Silver
Available in sizes: No. 80-2 \$59.7K
8, 9 1/2, 10, 11 for \$2.00
10 1/2, 11 1/2, 12, 13 for \$7.55
12 1/2 & 13



BIG SAVINGS NOW

up to **33% off**



BIG 54 PIECE
JEWELRY REPAIR KIT
on special
"get acquainted" offer!

SPECIAL NOW

only **39¢**
with any purchase from this ad

Gigantic "New Customer" BARGAIN on 24 Bell Caps, 24 Jump Rings and 6 Spring Rings at small fraction of value. Save **BIG MONEY**, repair necklaces, earrings, etc. Special (not sold separately) limit one to customer—with any other purchase from this ad.

MCSK in Yellow Gold Color **NOW 39¢**
MCSK in White Gold Color **NOW 39¢**
Specify Choice

WRITE FOR NEW FREE CATALOG OR JEWELRY MAKING



Terrific Values on JEWELRY CRAFT and ROCKHOUDING Supplies!

No. 79-23
LADIES' RING MOUNTING
8 x 22 mm oval
Available in sizes: 4, 4 1/2, 5, 5 1/2, 6, 6 1/2, 7, 7 1/2, 8
No. 79-23 58K Sterling Silver
1 for \$1.90 3 for \$4.75



No. 79-6
LADIES' RING MOUNTING
9 x 18 mm oval
Available in sizes: 5, 5 1/2, 6, 6 1/2, 7, 7 1/2, 8
No. 79-6 58K Sterling Silver
1 for \$2.00 3 for \$5.00




FLASHLIGHT MAGNIFIER
Enlarges Objects 7X
Place "Flash Magnifier" ON object under scrutiny—snap on flashlight—and get 7 times magnification exactly where you need it. Gem stones and minerals look more beautiful... markings, flaws, defects are easily spotted, 7" long. Metal and plastic case. Colossal value.
Z-179 K. only \$1.95
Complete including 2 batteries...
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
NEW epoxy ADHESIVE
So good it's replacing rivets
MIRACLE ADHESIVE—you've seen it on T.V. and in LIFE—it bonds materials stronger than anything else. Aircraft industry using it instead of Rivets—replaces nails and screws. Perfect for jewelry making—Unconditionally guaranteed! Kit of 2 jars with complete instructions.
Order as: Z1-K. only \$1.30




GENUINE GEMS OFFER
10 Beautifully polished Baroque Gems of Citrine Topaz, Amethyst, Rock Crystal, Morganite and Aquamarine. 1/2" sizes... total weight 50 carats.
Order as: 5-12-K. \$1.00



BAROQUE GEMS IN SPECIAL ASSORTMENT
A big 2-oz. bag of ass't sizes from 1/2" to 1/4". Highly polished gems of Mexican Amethyst, Bird of Paradise Agate, Abalone Rainbow Pearl, etc. Very useful lot of gems for jewelry and for decorating hand bags. Don't pass this value up!
Order as: 537-K. bag only \$1.00



JEWELERS HORN ANVIL
A spectacular value... anvil is 4" long and 3 1/2" high. It is a \$3.30 value that we are offering at this special price to introduce our excellent line of tools to you.
Order as: 520-K. Special \$1.49



YOU CAN MAKE ROCK CRYSTAL STAR EARRINGS
Everything you need—including 1 pair 1/2" handcut faceted genuine Brazilian Rock Crystal sparkling stars; 2 sterling silver balls and 1 pair sterling silver ear wires—ready for mounting. A normal \$3.50 value. Now yours on our "Let's Get Acquainted" offer.
Order as: 5-15 K. now only \$1.00



GOOD MAKE-IT YOURSELF KIT
All the parts you need to make this gorgeous Rock Crystal STAR-BOW PIN. Star is 1/2" diameter—A big bargain... very smart.
Set only \$1.00 Order as: 2-65 K




MEXICAN AGATE SLABS
10 colorful highly polished 3/4" Slabs. Big variety of colors and bandings. Very outstanding value. Normal Retail Value. \$3.00 Now all ten in mammoth offering.
Order as: Z10-K. as advertised \$1.00



A sweet special! ROCK GEM CRYSTAL
Superior quality—15 x 20mm—octagon cut—outstanding bargain. 23 carats. Stone... approximately or for your collection!
Order as: Z-53-K. Special \$1.00




1/2 pound TIN OXIDE SPECIAL
Top quality, Tin oxide; most popular polishing agent. Big 8 ounce package at a big reduction. Price includes postage. Special! Special!
Order as: 524-K. only \$1.00



WE DARE YOU TO COMPARE
This "15X Ruper" Magnifier with any magnifier you now use! Full 1 1/2" diameter corrected lens! Nickel plated metal folding frame. Equivalent to other \$6 magnifiers.
Order as: T130-25 K. \$1.00



SPECIAL OFFER IN JEWELERS PLIERS
High polish, full chrome finish. Chain nose—the most useful jewelry pliers known. Better than most pliers that usually sell for \$2.00.
Order as: 524-K. Introductory offer \$1.00



"COLLECTORS' SPECIAL"
4 Unusual 1 inch polished specimens: Carnelian, Blue, Green, and Gray Brazilian Agate, Normal Retail Value \$3. All 4 offered on "Let's get acquainted" spectacular deal.
Order as: 29-K. Only \$1.00



GRIEGER'S 1633 E. WALNUT PASADENA, CALIF.
Prices include Taxes and Postage!

**NATIONAL GREEN GRINDING WHEELS
CONGO DIAMOND BLADES
THE TWO BEST, BOTH PREPAID IN U.S.A.**

National Green Silicon Carbide Grinding Wheels Lead Bushing, cost more, cut faster, Special Bonding. You can make perfectly flat sets with a 600 grit wheel by grinding on the side of the wheel using a very light pressure, doing no sanding.

GRINDING WHEELS Prepaid

State	arbor size	100G	220G	Gray-600G
6" x 1"	\$ 5.32	\$ 5.85	\$ 7.18
8" x 1"	7.97	8.76	10.76
8" x 1 1/2"	11.15	12.25	15.05
10" x 1 1/2"	16.90	18.55	22.80
12" x 1 1/2"	23.19	25.49	31.30

CONGO DIAMOND BLADES — Prepaid

State Arbor Size		State Arbor Size	
4" x 010	— \$10.00	10" x 050	— \$23.50
4" x 025	— 9.50	10" x 064	— \$28.00
6" x 025	— 10.30	12" x 040	— 24.00
6" x 032	— 10.50	12" x 050	— 28.50
6" x 040	— 12.50	12" x 064	— 33.00
7" x 040	— 14.00	14" x 050	— 33.00
8" x 032	— 14.00	14" x 064	— 38.00
8" x 040	— 15.50	16" x 050	— 37.80
8" x 050	— 19.50	16" x 064	— 43.00
9" x 040	— 18.50	18" x 064	— 51.00
9" x 050	— 22.00	20" x 064	— 59.00
9" x 064	— 26.00	20" x 075	— 74.00
10" x 040	— 20.00		

Select slabs and rough gem material. Select Hi-Gloss Baroque. Silicon carbide abrasives, 36 thru 600. Write for Price List.

AGATE SHOP

329 So. Pearl

Denver 9, Colorado

A White Christmas Gift

Beautiful specimens of silvery mica forming feather-like plumes, in a white feldspar matrix, from Washington.

PLUMOSE MUSCOVITE MICA

Approx. 1 1/2"x2" to 2"x2" \$1.00 ppd.
Approx. 2"x3" to 3"x3" \$2.00 ppd.

Other sizes at proportionate prices.

AND FOR COLOR

Deep red garnet crystals in gray mica schist from Alaska.

ALMANDINE GARNETS

Approx. 1/2 xl in matrix \$1.00 ppd.
" 3/4" to 1/2" xl in matrix \$2 ppd.

Minimum order \$1.00

SUMNER'S

21108 Devonshire St., Chatsworth, Calif.

Buy and Use a Good Mineral Book

Season's Greetings

Surprise the Rockhound in your family or friends with a gift of a brand new "find" in Brazil! We know you will delight them!

Quartz with Calcite — \$3.00 lb.
(F.O.B. Chatham, N. J.)

It is clear QUARTZ with colorful thin layers of Pink, Green or White CALCITE. Beautiful for cabochons, tumbling and carving. Specify color desired when ordering.

For the COLLECTORS we have some perfectly SUPER SPECIMENS. Write us and we will supply full details. New price list of all items now off the press. Yours for the asking.



Murray American Corp.

15 Commerce Street
Chatham, N. J.

A PLEASANT GIFT

R&M
FOR
CHRISTMAS

Please your friends
and relatives with
gift subscriptions

DOLLAR SPECIALS

Uncommon minerals from the Uranium fields near Grants, N. M.

NATIVE SELENIUM, matted hairs; **TYUYAMUNITE**, yellow coatings; 3 good fluorescents: **LIEBIGITE**, **ZIPPEITE**, and meta-**AUTUNITE**; and **PASCOITE**, a Vanadium ore.

\$1.00 each, or all 6 for \$5.00

The Prospectors Shop

201 W. San Francisco Santa Fe, N.M.



ANCIENT INDIAN TEXAS WARPOINTS

Nice quality, whole relics, \$13.50 per 100. Samples 20 for \$3. ppd.

ADVANCED COLLECTORS:

Rare 7" flint Texas spearheads \$14.50 each ppd. We have some YUMAS.

FRED CORCORAN

Box 514

Westwood, N. J.

RICHMOND GEM & MINERAL SOCIETY

The Richmond Gem and Mineral Society on July 12th, 1961, held an outdoor picnic at Bryan Park. A small fee was charged for a large meal, consisting of hot dogs, hamburgers, several types of baked beans, potato salad, and all the trimmings. After the meal all the members played Bingo with gem slabs as prizes. On July 15th four car loads of members set out to look for unakite, psilomelane, goeth-

ite, quartz, agate, and several types of fossils at Vesuvius, Va. Several large specimens of fossil scalifus tubes, also goethite were among the "Bonanzas" found. One of the unique finds of the day were the many small crystals of quartz found on the ore piles at the South River Mine north of Vesuvius, Va.

Rudolph J. Bland, Jr.
3218 Rueger Street
Richmond 21, Va.

Make this a **BLACK LIGHT** Christmas —with these gift-packaged lamps*

There's no better gift for the rock hound, mineralogist, fluorescent hobbyist than these long and short wave ultra-violet lamps. They are handsomely designed, sturdily built, and engineered for maximum fluorescent brilliance and coverage.

The holiday glow lasts all year 'round with these long and short wave lamps!



Short Wave NH Mineralight
with 8 fluorescent mineral specimens and booklet describing all known fluorescent minerals, where they are found and how to identify them. Designed specifically for rock and mineral collectors. The NH Mineralight is UL approved.
\$14.75



Long Wave BL-4 Black Ray Lamp
with four watt tube, and dense black light filter. Designed for hand-held convenience, the BL-4 is a rugged unit designed for arts and crafts applications.
\$12.95



***SPECIAL CHRISTMAS OFFER! Regular \$2.50 mineral collection for only \$1.00 (with purchase of any of above gift-packaged lamps)**

ULTRA VIOLET PRODUCTS INC.
SAN GABRIEL, CALIFORNIA

SCOTT WILLIAMS
Mineral Company, Inc.

BULLETIN

440 N. SCOTTSDALE ROAD - SCOTTSDALE, ARIZONA, U.S.A. - WHITNEY 5-0803

HEMATITE KIDNEY ORE

Aztec Peak, Gila County Arizona

Ferric Oxide. New find. We are pleased to announce the discovery of a notable occurrence of Hematite Kidney Ore. It is the first found in the state of Arizona and second find of any amount in the United States. Small amounts of Kidney Ore were found in the early days of mining in Michigan and Minnesota. The Aztec Peak Kidney Ore rivals that from the Cumberland area in England. In fact, a few professionals to view this new material asserted that it was from Cumberland. Our Hematite has not been buffed nor polished as is the English material, but the few that we had polished compare favorably with the English Hematites. Please see page 128 in F. H. Pough's A FIELD GUIDE TO ROCKS AND MINERALS for a good example of English Kidney Ore (this specimen was buffed to bring out the highlights.) The Arizona Hematite is very similar to this specimen in character though having an unpolished surface.

We offer a wide selection of Hematite Kidney Ore which occurs as brownish-red to iron-black compact reniform masses. The majority of the specimens have reniform surfaces with some tending toward mammillary, botryoidal and hemispherical (in small pieces). All specimens have a kidney-like character and an overall liver-red color. Most pieces can be buffed or polished to bring out their metallic luster.

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The specimens we offer are all twinned on faces 011 (prism), although some will exhibit repeated twinning on parallel faces to form triplets. This characteristic knee-shaped form due to this twinning affords a means to recognize the mineral. (Please see figure 556, Dana System of Mineralogy, Volume 1, entitled "Twins on 011"). The crystals are brownish-red color with deep red internal reflections. The crystal faces are very brilliant with an adamantine metallic luster. Although all of our crystals are twinned, it must be remembered that the figures in the text are idealized and such perfect twinning is rarely encountered in nature.

Specimens available for **micromounting** consist of small brilliant crystals in pyrophyllite priced at \$.50, \$1.00 and \$2.00.

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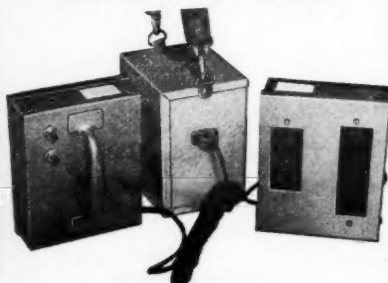
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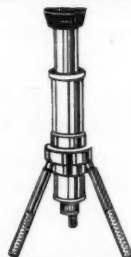
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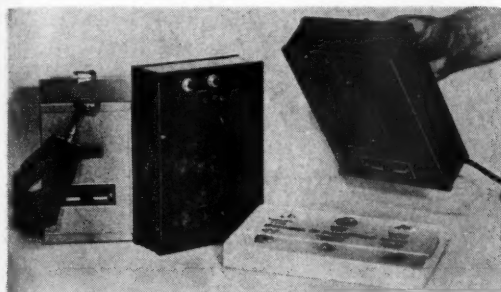
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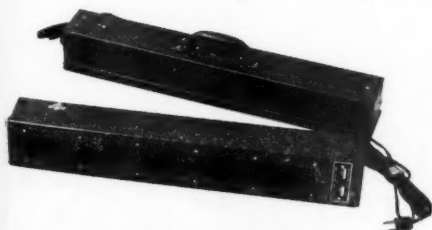
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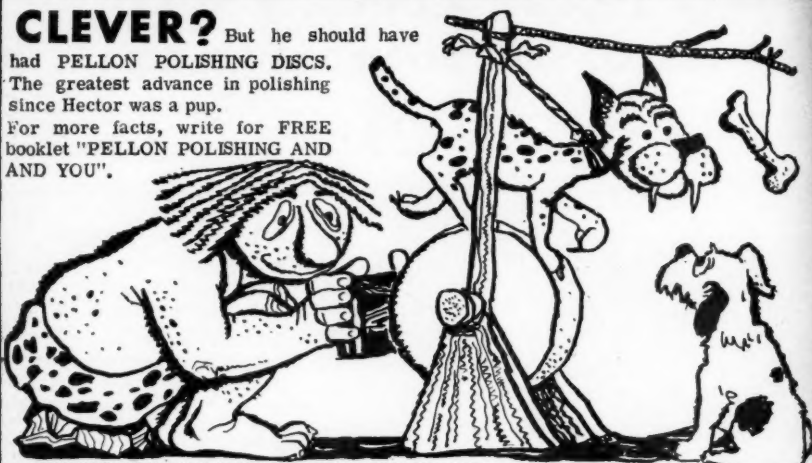
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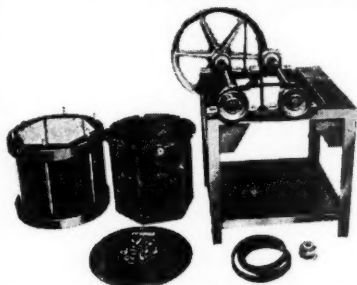
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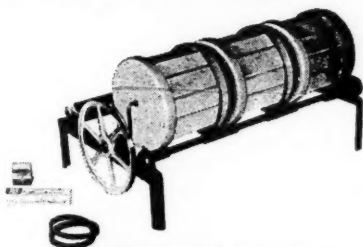
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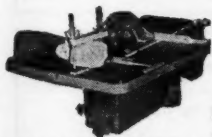
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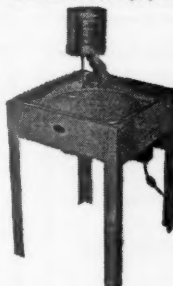


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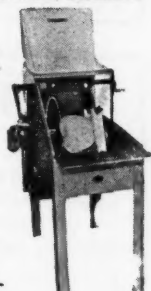
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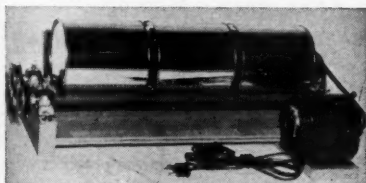
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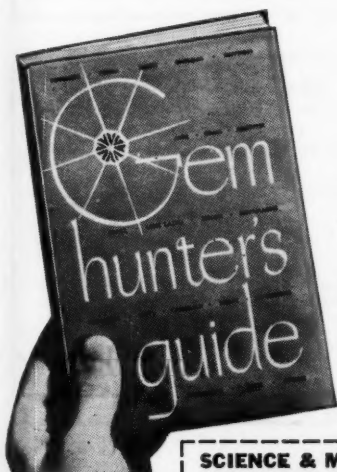
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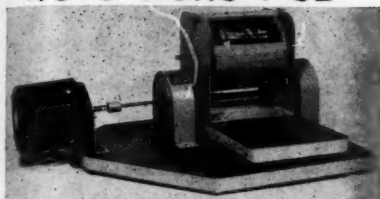
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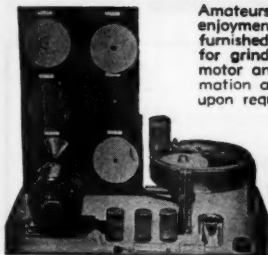
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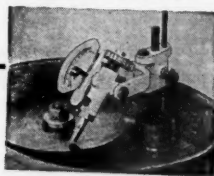
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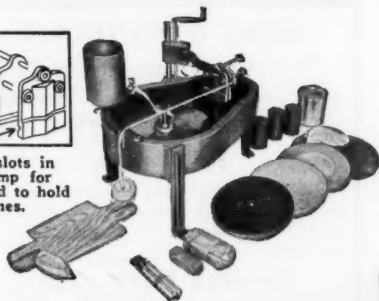
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DOLOMITE—Vari-colored designs, diversified patterns profusely distributed throughout, introductory 10 pounds minimum @ 75 cents pound. Kona dolomite, beautiful patterns of brown peach, black, with bands, panoramic mountain scenes or lacy effects, \$1.50 pound. Best Mexican rhodochrosite, dazzling pearly luster, deep rose-pink, \$1.50 pound. Mexican banded obsidian nodules, 85 cents pound. Gold and purple Aztec moss agate, \$2.00 pound. Jaspilite, glittering dark shade, red bands or swirls, \$1.75 pound. Thunder eggs containing moss agate, 75 cts. pound. Frasier River jade, \$1.25, \$4.00, \$8.00, \$16.00 pound according to grade. Petoskey stones, 85 cts. pound. Banded onyx for bookends, etc., 75 cts. pound. Unakite, \$1.25 pound. Foregoing prices include delivery. Minimum order any above or assorted, \$7.50. Wholesale prices on request. Ira Wallace, Box R, New Castle, Ky.

FACETED GEMS AND CABOCHONS—Am offering surplus from my collection at reasonable prices. Many rare & regular items. Correspondence invited. E. E. Joachim, 1710 Inverness Ave., N. E. Atlanta 6, Georgia.

MEXICAN AGATE, POUND PRICES—

Bird of Paradise, cathedral, naica vein, blue nodules, coyamito nodules, red spiderweb - \$1.75; psilomelane, lace, or tumbling amethyst - small 90¢, large \$1.50; laguna, moctezuma, mixed nodules - small \$2.50; FOB. Postage Please. Write list other materials. LITTLE GEM SHOP (Ray Lenhoff), 529 Cedar St., S. E., Albuquerque, New Mexico.

LAKE SUPERIOR AGATES —

Field run, 1 lb. 75¢. Medium size, polished, 1 lb. \$1.50 Select, rough tumbled, 1 lb. \$4.00. Postage extra. Will trade for good slabbing material. Free list of jewelry and findings at rock bottom prices. C. Secrist, Covington Dealer, 2219 Hershey Ave., Muscatine, Iowa.

MINERALS

FINE MATRIX SPECIMENS—Alaskan almandite garnets, 3x3" \$3.00. Singles, five for \$1.00. Diopside, Quebec, gray-green crystals in pink calcite 2x2" \$1.00. Eighteen classified fossils from Protozoa to Vertebrate, excellent study material, \$4.00. Robert Eaton, 54 Heberle Rd., Rochester, N. Y.

VELVET BLACK TOURMALINES — Fine, rare xl. specimens from Mexico. \$5.00 each ppd. Limited supply. Have couple specimens of museum quality. The Prospectors, Rt. 1, Box 260-A, Myrtle Creek, Oregon.

RED WING SPECIALS — Colorado epidote xls. 1/2" 15¢; 1" 50¢; Iowa geodes, matching halves, sparkling quartz filled, may contain calcite, dolomite and marcasite xls also. 1-1 1/2" 60¢; 4" cabinet specimens \$4.00. Wulfenite xls & small groups, Mammoth Mine, Tiger, Ariz. 1/2x 3/4" 75¢ actinolite, N. J. Fibrous green radiating, pure 2x2" \$2.00; 3x4" \$3.50. Satisfaction guaranteed. Free price list. Red Wing Rock Shop, Box 99, Limon, Colo.

SLABS — 50 sq. in. \$4.75; 100 sq. in. \$9.00. Both post paid. Materials include Agate, Petrified Wood, Obsidian, Rhodochrosite, Unakite, Honey Onyx, Aventurine, etc. Harley Hines, Mt. Olive, N.C.

MINERALS

A NEW DISCOVERY! WERNERITE (SCAPOLITE) — Beautiful fluorescent golden yellow under long and short wave, mixed with some tremolite, fluorescent bluish green at the same time, short wave. Note this price, lowest ever! \$1.00 per pound, plus postage. Any size you want. We also have a large stock of crystal groups from many countries. World Wide Minerals, Philipsburg, Que., Canada.

12 IMPORTANT MINERALS — Each in a separate plastic container, neat, clean, attractive. For children, students, rock hounds. \$2.00 pays postage, sale tax. Not for cutting. Money refunded if not satisfied. Eddie Doiron, 176 Victoria St., Moncton, N.B., Canada.

ROCK-OF-THE-MONTH CLUB — A nice, surprise package every month, but in a selection of your choice ... crystal specimens from thumbnails of cabinet size - cutting material or slabs - fossils - or fluorescents. Regular \$2 - \$3 values for \$1.00 per month plus postage. Limited Membership! Write for more information or send \$1.00 for first months package. No obligations. Indicate interested category. P. O. Box 705, Bakersfield, Calif.

MEXICAN AGATE ROUGH — See our new ads on page 628, Page 643, Page 651. Dealers inquiries welcomed. Gorin's Gemarts & Rocks, 3315 Tyler Ave., El Paso, Texas — Phone LO. 5-2666.

NATIVE PLACER GOLD — Four ounces gold placer sand in Buckskin Joe Gold Bag. Containing fine gold and at least one gold nugget in each bag. Xmas Special, \$3.00 postpaid. Canon City Gold Shop, Box 709, Canon City, Colo.

SPECTACULAR CABINET SPECIMENS — Of choice Michigan native copper from the world-famous Keweenaw mines. Free price list. K. Krause, 14190 Glastonbury, Detroit 23, Mich.

SELLING OUT AN OLD COLLECTION — Many specimens not now available. Must be seen to be appreciated. New Acquisitions: Siderite from an old lead mine, cassiterite from an old tin mine, both in Godfrey, S. C. H. W. Slocum, 625 Wilson St., Rock Hill, S. C.

MINERAL SETS — 18 beautiful crystallized mineral specimens, labeled and in attractive plastic box, \$4.95. 50 excellent thumbnails in wooden box, \$9.95, postpaid. Price list 25c. Delmann Minerals, P. O. Box 4101, Tucson, Arizona.

MINN., WISC., MICH., ONTARIO — Minerals, Coppers, cobalts, hematite, specularite, geothite, thomsonite, sphalerite, mohawkite, many others, all sizes. Lyle De Rusha, R. #1, Box 382, Chippewa Falls, Wisc.

CRYSTALLIZED LODGE GOLD NUGGETS — Attractively displayed \$2.00. Gold-bearing black sand \$1.00, gold dust \$1.00. Lester Lea, Box 942-R, Mt. Shasta, Calif.

BRIGHT COLORED FLUORESCENTS — Highly fluorescent willemite and calcite from Franklin, N. J. Each piece contains several different minerals. 50c per pound plus postage. Julia Kowal, R.D. 2, Goshen, N. Y.

BASTINITE, MONTEBRASITE, BARBOSALITE — Scorzalite, brackebuschite, and 1000 other mineral species and varieties in stock for the advanced or amateur collector. Send your want list. We trade. This issue, we offer the following specimens at 1" - 1x1 10c; 1x2 25c; 2x2 50c; fully labeled, postage extra: Actinolite, ankerite, arsenopyrite, chondrodite, colemanite, columbite, cuprodesclozite, deweylite, epidote, goethite, inderite, jarosite, muscovite, niccolite, phlogopite, spodumene, staurolite, tourmaline, triphylite. Unconditionally guaranteed. Catalog 10c. Allen's Minerals, Box 82, Selby, S. Dak.

NATURAL PLACER GOLD — Nuggets and grains. Excellent yellow color, coarse texture, ideal for jewelry or specimens. \$3.00 D.W.T. Money orders only. Better price on mine run unsorted gold in quantities. Snowshoe Trout Ranch, Avon, Montana.

GEODES — Crystal lined - whole - unbroken; 3" to 5" \$1.50 postpaid. Guaranteed. Many contain tiny loose doubly terminated quartz xls & clusters, and other inclusions. The Vellor Co., P.O. Box 2344, St. Louis 14, Mo.

GENUINE WHITBY JET — "Blue John" fluorite, Cumberland hematite, Cornish serpentine. \$10 parcel postpaid. N. Deane. Mounts Rd., Wednesbury, Staffs, England.

BRILLIANT FLUORESCENTS — From world famous Franklin, New Jersey. Assortment of calcite, fluoresces red; willemite, fl. green; hardystonite, fl. lavender, with franklinite, etc. Every piece inspected under short wave ultra violet lamp, identified and individually wrapped. High grade material. No junk. Choice of 8 pieces averaging 1", or 4 larger specimens only \$1.00 postpaid in U.S.A. Fluorescents, P. O. Box 124, Garfield, New Jersey.

ROCKS AND MINERALS

MINERALS

ASTERIATED ROSE QUARTZ (Georgia)—

\$2.50 lb., Virginia unakite \$1.25 lb., Georgia banded travertine 75c lb., massive epidote \$1.25 lb., purple jasper with epidote \$1.00 lb., Apache tears "smoky topaz" rough \$1.00 lb., snowflake obsidian \$1.00 lb. Specimens—drusy quartz on quartz crystals, 2x2, 75c, sea green foliated talc 50c lb., pink Georgia marble 50c Please add postage. List & corundum crystal 25c coin. Geo. Brown, Box 535, Gainesville, Ga.

GOOD INVESTMENT — Popular gem materials in 100# lots. Stock up now. Selling out surplus. Epidote - \$50.00. Travertine - \$30.00. Dendritic jasper - \$60.00. Veined jasper (brown with black) \$40.00. Red banded limestone for (for bookends) \$30.00. Va. unakite - \$40.00. Also tumble polished stones: Epidote - \$5.00 lb. feldspar (pink or white) \$4.00 lb. Mixed jasper \$4.00, tigereye \$6.00. Rough shipped truck freight collect. Add adequate postage on polished stones. Webb's Rock Shop, Linville, N.C.

If it's a mineral—our Advertisers have it — If they don't have it — they can get it — if they can't get it — it isn't a mineral.

LOUISIANA LAPIDARY & SPECIMEN MATERIALS—Louisiana banded & fortification agates, selected \$2.25 per lb. Petrified wood \$1.00 lb., opalized palm slabs \$2.00 ea. Nine items collection all different from Louisiana, including silicified coral and agates, postpaid \$3.00. Ken Kyte, Box 161 or 530 E. Boston St., Covington, Louisiana.

MINERAL MINIATURES—Dealer in micro-mount emeralds from Chivor Mine, Colombia. Single, splendid terminated and unusual xl forms, clusters; clear to deep green color. Also other unusual mineral specimens. Prices \$1.00 to \$5.00. State preference. Mineral Miniatures, Box 761, Emory Br., Atlanta, Ga.

COLORADO MINERALS—Huebnerite, zunyite, enargite, gold tetrahedrite - From the San Juan Mountains of Colo. Many other minerals. Write for free catalog. We have a few exceptionally nice huebnerite specimens with large erect reddish brown crystals. Write for prices. San Juan Minerals, Box 33, Bayfield, Colorado.

IN MIAMI, FLORIDA—Visit the Rock & Shell Shop, the complete Rock Shop. We have lapidary equipment supplies, rough and slabbed gem materials. Mineral specimens, mountings and jewelry. Agatized coral our specialty. Sorry, no catalog. Rock & Shell Shop, 2036 S.W. 57th Ave. (Red Rd.), Miami 44, Fla. Visitors always welcome. Geo. & Mildred Williamson.

PLUMOSE MICA—If you want to add a new and interesting specimen to your collection - this is it. Choice cabinet specimens, \$3.00 to \$7.00. Museum type specimens, \$8.00 and up. Thumb-nail sizes, 50¢ each in lots of six. Satisfaction guaranteed. All orders postpaid. Wilbur M. Olson, Rt. 4, Newport, Wash.

NEEDLE QUARTZ COLLECTION—Ten perfect rare specimens, five dollar value. Xmas Special, \$2.00 postpaid. Canon City Gold Shop, Box 709, Canon City, Colo.

MINERAL SPECIMENS — Large variety-domestic and foreign. Mineralights-Microscopes Pocket and hand lenses, Books, Geology hammers, Gifts items. No lists. Specific inquiries gladly answered. Your inquiries invited. Globe Minerals, 163-03 Depot Road, Flushing 58, New York, U. S. A.

SCOTT'S ROSE QUARTZ CO.—Rose quartz and many other Black Hills rock specimens of various kinds and colors for Rock Gardens, Cabinet collections etc. Attractively boxed specimen collections, labeled and mounted, including informative list, in several sizes. Send 4¢ stamp for price list. 1020 Custer Avenue, Custer, S. Dakota.

FOUR NATURAL STAUROLITES — For \$1.00. Cross on both sides. Menagerie assembled from uncut quartz crystals. "Rockhounds", \$1.25 each. You really should have one. Five assorted animals, \$5.50, postpaid. Reasoner Rock Originals, Crown King Hwy., Bumble Bee, Arizona.

WHOLESALE GEM MATERIAL — Save freight. Your choice - 10 kinds. Palmwood, opalite, jasp-agate, budseye, golden onyx, crawfordite, jasper, chapenite, verde antique, travertine (green). \$16.50 per 100 lb. bag. Freight paid. Sample, \$5.00, postpaid. Morton Minerals & Mining, 21423 Hwy. 66, RFD 1, Barstow, California. Wholesale. Dept. E.

MINERALS

TURQUOISE FOR SALE—Turquoise in the rough priced at from \$5 to \$50 a pound. Royal Blue Mines Co., Box 646, Tonopah, Nevada.

WYOMING AGATES — 10 sq. ins. \$4.00. County location and name on each slice. Please include postage. Free list and one sq. in. jade with order. Rawhide Rock Shop & Museum, South 87, Orin, Wyo.

JAPANESE MINERAL SPECIMENS — From Many Japanese localities. Please write for price list. Sugiyama & Company, Ltd., 219, Honmoku Moto-Machi, Naka-Ku, Yokohama, Japan.

COLORADO GOLD COLLECTION — Gold Nugget, wire gold, quartz gold, placer gold, gold dust, gold millings, gold sand, flake gold, spike gold and telluride gold. Ten specimens, value ten dollars. Xmas Special, \$5.00 postpaid. Canon City Gold Shop, Box 709, Canon City, Colo.

LIKE MINERALS??? TRY THIS DEAL — Two lovely minerals postpaid for only \$1.75. I know you will want more. Seven years in mail order is our guarantee. Everett Lapidary Shop, 2941 North 65th, Lincoln 5, Nebraska.

SPECTACULAR FLUORESCENT MINERALS — Brilliant orange S.W. only; manganosulphate. Brilliant cream-blue-white; S.W. only nicholsonite. Both rare, both phos., both for \$3.50 postpaid. Over 1/2 fist size. Send postage and get extra bonus. Thomas' Lapidary, 706 Church, Royersford, Pa.

A UNIQUE EXPERIMENT — We will send you approximately 20 pounds of agate, assorted woods including Eden Valley, dinosaur bone, snowflake jade, etc. You send \$3.00 to cover postage. After examining the material you send us what you think it is worth and you keep all the material. Circle "C" Explorers, P.O. Box 2, Grand Junction, Colorado.

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CROCOITE XLS—Pseudogarnierite, pseudoviolarite, pseudohonnesite, (acicular xls after millerite). Rare items. Pretty ankerite xls on shining marmatite. Platy covellite xls. Atacamite, hydrozincite xls, sphalerite with orange fluorescence. Blue hemomorphite, bournonite, ruby zinc, deep, red rutile xls in pyrophyllite. Litharge, cannanite, chalcotrichite. Deep blue shattuckite xls, fine scheelite, greenockite, erythrite. Many others. List 10¢. Old Trails Minera's, 9207 Argyle, Overland 14, Mo.

RARE & UNCOMMON MINERALS FROM FRANKLIN, N. J. & MAINE AREA FOR SALE — Over 20 different minerals and crystals from famous Franklin Zinc Mines, plus many rare minerals from Maine including rose quartz xls and purple apatite xls. Send for free price list. Richard Wilchynski, 83 Edwards St., Apt. 2A, Roslyn Heights, N. Y.

NATIVE COPPER — Choice specimens of all forms: CRYSTALLIZED (a specialty), wiry, leaf, and hackly, with various associations. Also, copper inclusions in calcite xls. "Halfbreeds", and native silver. Prices: \$.50 to \$35.00 depending on quality. Specimens are from Michigan with exact locations given. Lewis Larsen, 1613-14th Ave., Menominee, Michigan.

CONNECTICUT MINERALS FOR SALE — Apophyllite - tabular (rare) on prehnite and quartz xls coated with gold stilpnomelane. Quartz xls coated with green chlorite. Singular or combinations of datolite, prehnite, quartz xls, calcite and epidote. Greenish datolite on amethyst. Stephen Ridel, 228 South Center Street, Windsor Locks, Conn.

CONNECTICUT MINERALS — Beryl, rose quartz, tourmaline, quartz crystals, prehnite, stilbite, garnets (including essonite) spodumene, etc. Recently acquired specimens of quartz xls with chlorite inclusions from Chatham, N. Y. Open Sat. and Sun. Pappy's Beryl Shop Route 6A, East Hampton (opposite White House Motel), Conn.

MINERALS

"HERKIMER DIAMONDS" MATRIX — \$3.00 each. Herkimer diamonds \$1.00 each. Better grade \$3.00 and gem quality \$5.00 each, less than 3/4 inches. Large "Herkimers" from \$2.00 to \$20.00 each. Clusters \$10.00 each. Graduated in size groups, from 1/4 in. to 2 inches and over consisting of 12 pieces, \$25.00. Ace of Diamonds, P.O. Box 171, Little Falls, N. Y.

JADE COVE NEPHRITE—15 sq. inches of slabs, color dark green to ripe olive. Good percentage of gem quality. Send no money. If not approved by you, return for refund of your postage expense. Otherwise remit \$2.00 plus 20¢ excise. Limit one order at a time. Point Motel Rock Shop, Morro Bay, California.

RICH SILVER ORE SLABS (BEAUTIFUL PATTERN)—3/16" thick, \$3.00 per oz.; dendritic silver, \$8.00 per lb.; basalt "diabase silver" \$4.00 to \$8.00 per lb.; orange yellow cancrinite, \$10.00 per lb.; trachyte porphyry, vivid green dolomite, rocky bornite, pale green amazonite, galena, \$1.50 per lb.; cancrinite specimen, \$3.00 per lb.; garnet crystals (not suitable for cutting), kyanite crystals & garnets in schist, epidote, light pink quartz, sphene crystals in feldspar, \$2.00 per lb.; scheelite in white quartz, smaltite, \$2.50 per lb.; argentiferous freibergite, \$2.00 per lb. postpaid to U.S.A. and Canada. Minimum order \$5.00. Canadian Gems & Minerals Limited, Drower 730, Kirkland Lake, Ontario, Canada.

MEXICAN MATERIAL: Topaz crystals, interesting structures, use as hardness points, approximately 1/4 inch in diameter, \$2.00 per 100 postpaid; cherry and honey opal without matrix, selected to make beautiful cabochons, 1/4 lb. \$2.00 postpaid. Apatite crystals from Durango, 1/2 lb. assorted, \$2.00 postpaid. C. Buescher, 3603 Ridgedale, St. Louis 20, Missouri.

PICTURE PALM SLABS—One of California's most popular gems, root & fiber agatized with beautiful picturesque multicolor designs. Resembling eyes, flowers, animals, scenes, curls, swells. Beautiful cab & specimen material a must for all collections. Sources depleted. I am disposing my large old collection, every slab different. Values exceptional - 75c sq. in. - NOW - 25 sq. in. \$6.50; 50 sq. in. \$10.00; 100 sq. in. \$18.00; generous sample \$1.00, large sample \$2.00. Orders postpaid with bonus. C. T. Brown, 1355 Gladys Ave., Long Beach 4, Calif.

SHOWPIECES, DANA SPECIMENS—Other collectors items from stock. Entire private collection. Itemized list 10¢. JAC Minerals, Box 4056, Pasadena, Calif.

ELLENVILLE MINERALS—Send five dollars and receive selection of crystallized and crystalline specimens - quartz xls., galena, pyrite etc. Satisfaction guaranteed. Six thumbnails one dollar. Three 1 x 2" \$1.50. Postage please. George Heusser, Berne Road, Ellenville, N. Y.

LEAVING FOR UNIVERSITY—Clearing out stock: uranophane, thorite, cyrtolite, diopside, selenite, wernerite, large pure pitchblende (N.W.T.), and many other Canadian species. Special: deepest solid royal blue sodalite, 2 x 2 - \$1.00, also tumbling material and larger pieces. Douglas Scott, Markham, Ontario, Canada.

CORUNDUM CRYSTALS — 1/4" to 1" in diameter. One pound - \$20.00; 1/4 pound - \$7.00. Postpaid. Western Minerals, Box 768, Dillon, Montana.

BLUE CELESTITE XLS ON LIMESTONE — From Chittenango Falls, New York. Superb specimens. \$1 to \$5 priced according to quality. Free SURPRISE specimens with each order. Adrian Labuz, 12 Sherrill Lane, New Hartford, New York.

MISCELLANEOUS

BEAUTIFUL TUMBLED PERIDOTS—\$16.00 lb. Floss ferri - aragonite xls \$1.00, \$3.50, \$8.00 ea. Chrysocolla \$3.50 lb. Apache tears - mine run 45¢ lb.; vanadium xls 50¢, \$1.00, \$15.00 ea. Arizona wood 50¢ lb. Fluorescent opal \$1.50 lb. Shells & coral, all kinds. Lamps - \$3.00, \$5.00 and \$8.00 ea. Many kinds of fossils. Dentic copper slabs \$1.00, \$2.50, \$5.00. Tumbled agate \$2.50 lb., desert glass 50¢ lb. Georgia's Rock & Shell Garden, 549 E. Cedar, Globe, Ariz.

NOTICE, TO WHOM IT MAY CONCERN! —The Rhodonite Quarry, near Central Plains, Va., is closed to collectors until further notice. Violators will be prosecuted. F. C. Landes, Box 194, Fork Union, Va.

MERRY CHRISTMAS, HAPPY AND SUCCESSFUL ROCK HUNTING - DURING 1962—Roy Snyder, Adirondack Cabins, Adirondack Guide, Adirondack Minerals, on Rte. #9, 5 miles north of Chestertown, N. Y. Phone 2420.

MISCELLANEOUS

TUMBLER ARIZONA AGATE AND APACHE TEARS FOR SALE — \$2.50 per pound. E. J. Helke, 1043 East 8th St., Mesa, Arizona.

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IF YOU ARE LOOKING FOR BLACK LIGHTS — Fluorescent, rough and slab materials. Also high grade faceting materials . . . come visit us. Eight inch hard maple wood wheels, for polishing, grooved to order (treated against oil or water). Also #40 cast iron laps 6" & 8". Open evenings and all day Sat. & Sun. Flick's Lapidary Shop, 1803 Millfair Road, Erie, Pa. (half-way between routes 5 & 20).

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TUMBLER, MIXED, BAROQUES — \$2.50 lb. or 10 lbs. at \$2.00 lb. Mexican polished slabs \$7.00 lb. Polished Mex. agate, specimens \$3.50 lb. Cutting material - aporhyolite \$50.00 hundred lbs. plus postage, Ins. Specimens of all kinds 50c & up. AGB Mineral Shop, 2412 E. Rockhurst Ave., Ogden, Boothwyn, Pa.

PETOSKEY STONES — Smoothly waterworn 70c lb. 10 lbs. and over 60c lb. Slabbing stones up to 1 1/2 lbs., 50c lb. Beginners stones (mixture of rough and waterworn) 50c lb. All prices plus postage. Dealers prices on large quantities. Don't forget to include postage. Jane Malzahn, 1610 Van Buren, Saginaw, Mich.

WANTED, TO BUY — Good sharp single crystals of broggerite, magnetite, boracite, cobaltite, molybdenite. Richard C. Johndy, Cascade Minerals, Cascade Road, Lake Placid, New York.

SAVE UNNECESSARY WORK — Buy cab material already slabbed. Assortment of 10 slabs includes: cycad, golden wood, palm, opalized wood, and others for \$10.00. All choice material. Please include postage. R. Palmo, 2204 E. Anagus, Victoria, Texas.

SALT LAKE CITY, UTAH — Drop in when out this way. A complete lapidary equipment, supplies, findings, rough Australian opal, Spec-Tec Blacklights, etc. No catalog. Will give a sample of oolite sand from the shores of Great Salt Lake, plus a circular giving directions to Utah locations to those who drop in and ask for some or enclose a stamped, self addressed envelope with inquiry. Ken Stewart's Gem Shop, 136 West South Temple, 1/2 block west of Temple Square, Salt Lake City, Utah.

MUSEUM DIRECTORY — "Mineral, Fossil, Rock Exhibits and where to see them." Lists information on nearly 200 public museums in U.S. and Canada with geological exhibits. Order from American Geological Institute, 2101 Constitution Ave., Washington 25, D.C. 50c.

NAVAJO LAND — Vacation headquarters. Indian wares, fluorescent lights, & minerals. Set of 8 - 2"x2" color slides of our fluorescent display \$2.35 P.P. Glen Canyon Trading Post, Box 1895, Page, Ariz.

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ALPHA-COUNTER — For immediate positive detection of radioactive ores. Guaranteed to operate wherever alpha particles are present. Operates with all uranium minerals. \$9.25 post paid. Breeders Equipment Co., Flourtown, Pa.

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MISCELLANEOUS

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Comprehensive stock of rare unusual cabinet and show specimens. Septarian geodes and nodules. Geodes and nodules from New and Old Mexico. Many cut and polished, fluorescing beautiful colors. Iowa geodes with many inclusions, some with rare deep purple crystals. Remember, I pioneered fluorescing natural wood; in stock over twenty species. Many carved into animal figures, spheroids etc. Fluorescing cutting material, hundreds of other items. No mail orders, come see what you buy. North Market Street, U.S. Highway 63, ONE MILE NORTH OF POST OFFICE.

DEALERS—Write for wholesale price lists on our fabulous line of non-tarnishing aluminum chains and findings. If you include \$1.00, samples will also be sent. Please include your tax number with letter. R. B. Berry & Co., 5040 Corby St., Omaha, Nebr.

OPEN YOUR OWN GEODE—We will send one 4 inch diameter geode properly opened and one 3 inch geode not open with opening instructions for \$4.50. Three are top grade Keokuk geodes, Maurice Lamb, Niota, Ill.

OUR BAROQUE JEWELRY STORE—Is located in Hackensack, N. J. Wholesale and retail fittings, findings, chains, cement, caps, baroques, etc. Open every day including Saturday. Wednesdays 1 to 5. See your stones and findings before you buy them. Dale Lyn Jewelry, 224 Main St., Hackensack, N. J.

WANT TO BUY—Mineral collections - Museum quality, domestic and foreign. Small collections and groups of excellent quality acceptable. No shipments prior to correspondence. Write complete details. G. M., 163-03 Depot Road, Flushing 58, New York, U. S. A.

ULTRAVIOLET LIGHTS—Make your own. For beautifully fluorescent mineral displays, prospecting, etc. Handbook tells how. Easy, inexpensive. Send \$1.00. Transspace Laboratory, Box 111, Princeton Junction, New Jersey.

NEW EAR BOBS—For hanging stones, screw type. When on ears look exactly like pierced ears. Gold or rhodium. 16 for \$1.00, 72 for \$3.25, 144 for \$5.90. Postage extra. 10% tax if not for resale. We also stock other ear rings such as half ball, whole ball, $\frac{3}{8}$ " filigree, $\frac{3}{8}$ " flat pad, pierced ear, $\frac{3}{4}$ " filigree etc. New list ready. Free M. W. Avery, 332 Columbia Blvd., Woodridge, N. J.

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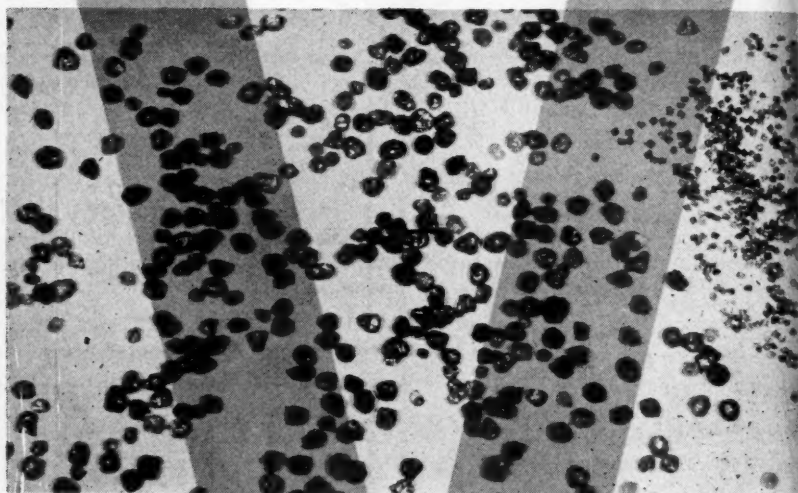
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